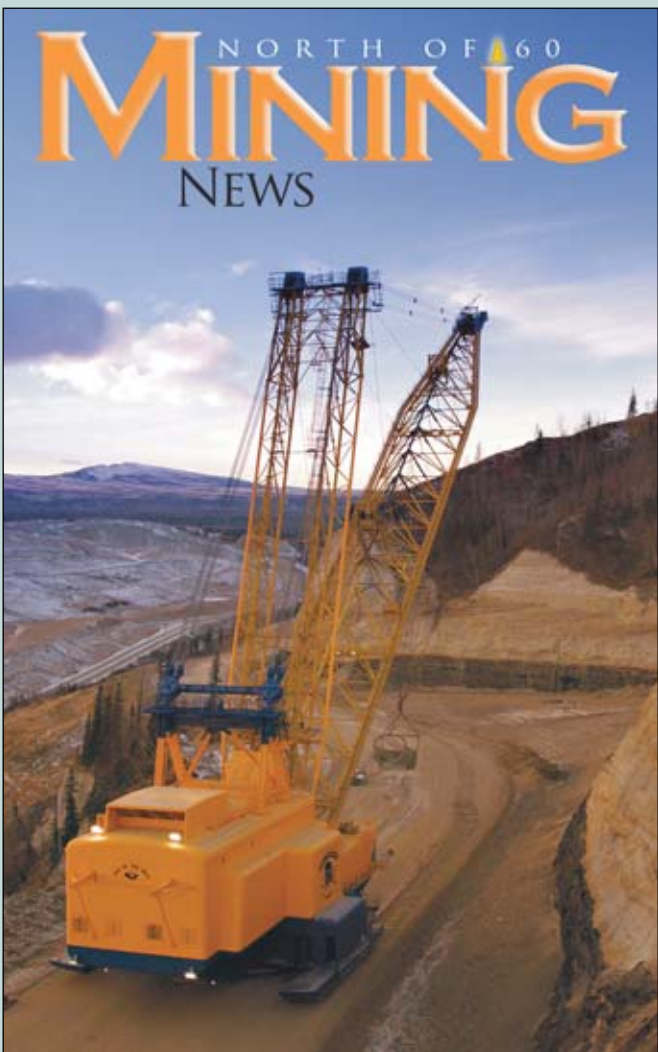




## North of 60 Mining News inside



The July edition of North of 60 Mining News, a special supplement to Petroleum News, is enclosed. Stories include the latest news from Golden Summit, Pebble, Pogo, Galore Creek, Kensington, Red Dog, Rock Creek and more.

## Public-private partnership building B.C. resource road

A public-private partnership has signed a deal to open year-round access to almost 7,000 square miles of oil and natural gas territory in northeastern British Columbia.

British Columbia Energy and Mines Minister Richard Neufeld announced in late June that Ledcor Projects had signed a C\$40 million deal to design, finance and upgrade a 105-mile resource road in the Fort Nelson area.

A bridge will be completed by December 1 and work on the Sierra Yoyo Desan Road will be finished by the end of 2005, when two-lane traffic will flow between Fort Nelson and the operating areas.



RICHARD NEUFELD

see PARTNERSHIP page 16

## BREAKING NEWS

**7 Nova Scotia setback:** Companies walk from basin; hopes hang on Marathon Canada well and Canadian Superior promise

**9 North to Alaska:** Part two of an article about the increasing interest among oil and gas companies in exploring Alaska's prolific basins

**10 Oil sands rush:** California-based firm turning two Alberta pipelines into part of new corridor to U.S. Rocky Mountain refineries

## GULF OF MEXICO

# St. Malo gets bigger

Another 400 feet of net oil pay uncovered, weighing Walker Ridge options

By RAY TYSON

Petroleum News Houston Correspondent

St. Malo, already an impressive deepwater find by Gulf of Mexico standards, is looking more like a major oil discovery as the owners examine results from a key appraisal well and review their development options.

Last October's announced discovery at Walker Ridge block 678 encountered more than 450 feet of net oil pay, ranking St. Malo among the U.S. Gulf's more promising deepwater oil prospects but raising questions about the field's reach and true potential.

The owners answered at least one of those questions in early July with an appraisal well that recently penetrated more than 400 feet of net oil pay more than a mile east and below the initial discovery.

"The appraisal well results ... indicate the field's

Unocal said the evaluation process would now focus on field productivity, the need for further appraisal drilling and viability of various development options, "with the current objective of establishing commerciality in 2005."

potential hydrocarbon resources are greater than previously suggested by the discovery well," St. Malo operator Unocal said July 1.

Unocal said the evaluation process would now focus on field productivity, the need for further appraisal drilling and viability of various development options, "with the current objective of establishing commerciality in 2005."

see ST. MALO page 16

## NORTH SLOPE ALASKA

# Pioneer looks at onshore pad north of Prudhoe

Would be on Gwydyr Bay area lease, in vicinity of BP's '97 Pete's Wicked discovery

By KRISTEN NELSON

Petroleum News Editor-in-Chief

Pioneer Natural Resources has four North Slope prospects it has drilled or hopes to drill soon, Ken Sheffield, president of Pioneer's Alaska subsidiary, told the Alaska Support Industry Alliance in late May.

The company plans to shoot 3-D seismic at its Storms prospect south of

Prudhoe Bay this winter and to sanction development in the fourth quarter of the year at the Oooguruk prospect in Harrison Bay, where the company made discoveries in the winter of 2002-03. Pioneer has another offshore prospect, Caribou, "north of Point McIntyre on trend with (BP's) Northstar," he said.

Sheffield also mentioned a fourth prospect, onshore at Gwydyr Bay, and

see PIONEER page 15



Ken Sheffield, president of Pioneer's Alaska subsidiary

JUDY PATRICK

## ALASKA-BRITISH COLUMBIA

# Railway picks up steam

Canadian government ready to deal on Alaska-British Columbia rail link

By GARY PARK

Petroleum News Calgary Correspondent

Another piece is falling into place in the ambitious plans for an Alaska-British Columbia rail link — a project that holds special interest for the oil and gas industry.

Just a month after the Canadian government said it would cooperate with the United States to look at ways of moving the mega-project forward, Canadian National Railway, Canada's largest railroad, has been cleared to take control of BC Rail by mid-July.

On July 2, Canada's Competition Bureau approved a C\$1 billion deal, first announced last November, for Canadian National to take over BC



COURTESY OF CANADIAN NATIONAL

see RAILWAY page 16

Canadian National Railway locomotive

• BEIJING, CHINA

# BP could be set to boost stake in China's growing market

*China's booming energy consumption changes global market dynamics*

By ALLEN BAKER

Petroleum News Contributing Writer

China could be a major focus for BP in the years ahead as the huge country's energy consumption grows and the British company builds on its already-healthy stake in Asia's powerhouse.

Byron Grote, BP's managing director and chief financial officer, was in China's capital city early in July for further talks with Chinese officials, and with executives of the three biggest Chinese oil companies.

Grote was following up on a visit to BP headquarters in London in May by Chinese Premier Wen Jiabao, who was on a 12-day tour of Europe.

Wen stopped at BP and at GlaxoSmithKline, another big investor in China, at the start of a three-day visit in Britain, underscoring China's interest in boosting trade ties.

BP has already invested more than \$4 billion in China since 1973, including upstream investments in the Yacheng-13 gas field and the Liu Hua oil field in the South China Sea. BP is also an investor in China's first LNG regasification terminal in southern Guangdong Province, and has very substantial interests in the petrochemicals business and a growing presence in the retail sector.

## \$3 billion more

In January, the company said it planned to add \$3 billion to its China holdings over the next five years. Just where the investment might be targeted wasn't mentioned.

But in May, BP announced that it had signed an initial agreement to build a new acetic acid plant in Nanjing to produce half a million tons annually, in a joint venture with China's Sinopec. The company also

*China's total energy demand surged 13.8 percent last year, according to the BP Statistical Review of World Energy released in June. China's consumption of oil, gas, coal and nuclear power all increased by more than 10 percent.*

announced at that time that it had signed a letter of intent to explore expanding its PTA plant in the Pearl River Delta to 1.2 million tons annually from 350,000 tons.

Two joint venture contracts for retail Chinese operations were also signed, for 500 stations in Zhejiang Province and 500 more in Guangdong, to be built by 2007. BP holds 40 percent of the Zhejiang deal and 49 percent of the Guangdong venture.

All told, the BP announcements in May totaled about \$1 billion, the company said.

One thing is clear: The thirst for energy of China's 1.3 billion people will grow in coming years, as BP's own analysis shows.

China's total energy demand surged 13.8 percent last year, according to the BP Statistical Review of World Energy released in June. China's consumption of oil, gas, coal and nuclear power all increased by more than 10 percent.

## 41% of demand growth

With an increase in consumption of 606,000 barrels daily, China accounted for a startling 41 percent of the growth in total world oil demand. Oil imports grew by 32 percent to 2.6 million barrels daily, tightening the world market and providing a big part of the reason for today's high oil prices.

China is now the world's second-largest oil consumer, with 2003 consumption (including Hong Kong) of 6,253,000 barrels daily.

And China's consumption will almost certainly continue to grow.

China is building high-speed roads connecting major population centers in the interior regions in a bid to even out eco-

nomics development, which has been concentrated along the eastern coast as industries serving the export economy have blossomed.

## Jammed freeways

And motor vehicle ownership is surging. Six-lane expressways in Beijing are crammed with cars virtually around the clock. In outlying areas, there are increasing numbers of small scooters and motorcycles, which can cost the equivalent of about \$600, thus bringing them into the range of a larger group of working people in China as incomes advance.

China will be able to supply some of its own oil, with large areas of the country and its coastline that have yet to be explored. But oil prospecting is difficult because of the country's complicated geological structure. So the Chinese government has been looking at ways to add strategic storage, just as the United States has done. As with the United States, net importing of oil is likely for the foreseeable future.

## China's challenge

The challenge for China, BP's Grote told the Xinhua news agency, is for China to gain access to global energy supplies at competitive prices and to create and apply appropriate technologies for transforming energy consumption.

Also in Beijing with Grote was Michael Smith, group head of Global Energy Analysis for BP.

Smith told Xinhua that a big change in the structure of economy would take place when energy starts to bottleneck the growth of economy, which would trigger the move from energy intensive industries toward services, light industries and high-tech industries.

The increase of energy efficiency as well as the shift from heavy industry helped Western economies deal with energy shortages, said Smith, who suggested that China's current growth rate in energy consumption doesn't look sustainable. ●



## ENGINEERING EXCELLENCE

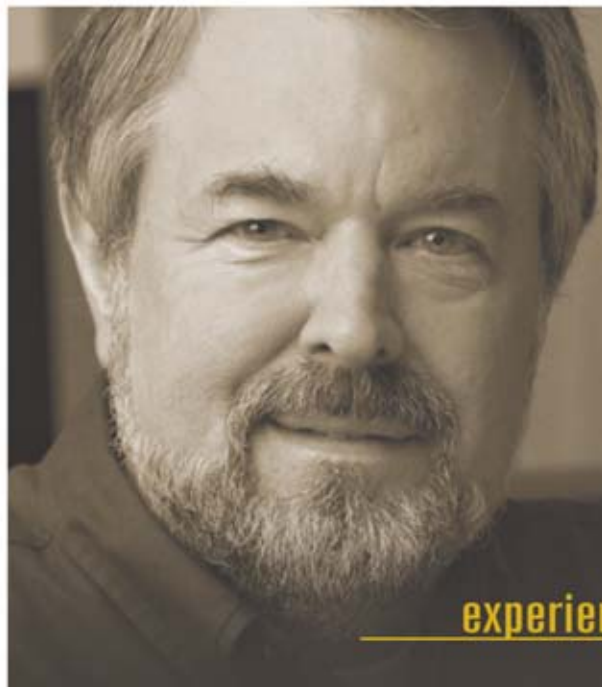
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## QUINTANA, TEXAS

### ConocoPhillips finalizes agreement with Freeport LNG for Texas terminal

ConocoPhillips said July 6 that it has finalized its transaction with Freeport LNG Development L.P. to participate in the proposed liquefied natural gas receiving terminal in Quintana, Brazoria County, Texas.

ConocoPhillips said it has acquired 1 billion cubic feet per day of regasification capacity in the terminal, has obtained a 50 percent interest in the general partner managing the venture and will provide substantial construction funding to the venture. Michael S. Smith owns the other 50 percent of Freeport LNG Development.

The Federal Energy Regulatory Commission approved the facility June 18, and receipt of all other necessary federal, state and local approvals is expected in the third quarter, ConocoPhillips said, with construction scheduled to begin in the fourth quarter and commercial startup planned for the second half of 2007.

The Freeport LNG terminal will have a storage capacity of nearly 7 bcf and send-out capacity of 1.5 bcf per day. Natural gas from the facility will be transported through a 9.4-mile pipeline to Stratton Ridge, Texas, a major point of interconnection with the Texas intrastate gas pipeline system.

ConocoPhillips said the current management of Freeport LNG will remain in place and will oversee the commercial activities of the partnership, while ConocoPhillips will provide leadership for management of construction and operation of the facility.

"This project is a critical link for the development of one or more of several LNG projects under consideration by ConocoPhillips," Sig Cornelius, president of ConocoPhillips Global Gas, said in a statement.

ConocoPhillips already operates refining, chemical and transportation businesses in Brazoria County, Texas.

## WASHINGTON, D.C.

### EIA predicts continued high oil prices, 'near current levels' through '05

The U.S. Department of Energy's Energy Information Administration said July 7 that it now expects to see oil prices in the \$37 a barrel range through the third quarter of the year, and prices in the high \$30s through the end of next year.

The agency said that while U.S. spot prices for West Texas Intermediate are down from highs above \$40 a barrel, they continue to fluctuate in the upper \$30s "despite general improvement in crude oil inventories and increases in output by key OPEC producers, including Saudi Arabia." Excluding Iraq, Organization of Petroleum Exporting Countries crude oil production in June was 27.1 million barrels per day, 800,000 bpd higher than May levels, and only about 1 million bpd below capacity.

Inventories in both the United States and the rest of the industrialized world remain below normal, "particularly when seen in the context of rapidly increasing global oil demand."

#### Oil demand growth at 2.6 percent

The agency said it expects growth in global oil demand "in excess of 2 million bar-

see EIA page 4

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## NPR-A

## Alpine satellite final EIS delayed

The U.S. Bureau of Land Management says the final environmental impact statement for the Alpine satellites, expected in early July, has been delayed to the end of August. BLM Alaska spokeswoman Jody Weil said the agency needs additional hydrology information before work can be completed.

"Our latest schedule anticipates a final EIS out at the end of August," Weil said July 7.

The proposal includes development of five satellites which would feed production into the production facility at Alpine, the most westerly of North Slope operating fields.

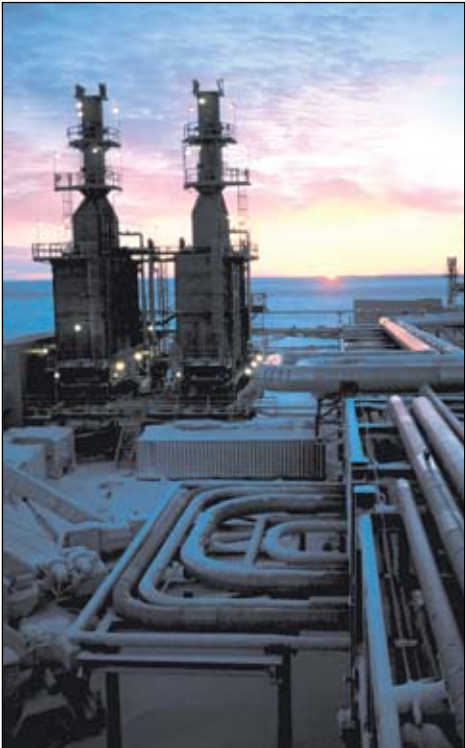
ConocoPhillips has said in regulatory filings that Alpine satellite work could begin next winter at Fiord and Nanuq, north and south of existing Alpine facilities and within the Colville River unit, with production possible from those satellites as early as 2006. Work would follow on satellites within the National Petroleum Reserve-Alaska, where a bridge and longer pipeline extensions are required.

ConocoPhillips has also said it will not sanction the project until it has regulatory approvals in hand.

When the draft EIS was released at the beginning of the year, ConocoPhillips Alaska spokeswoman Dawn Patience told Petroleum News that while ConocoPhillips is "excited about the potential of these satellites, a final decision (to go ahead) will be based on the EIS and permit outcome — and we also have work to do to improve the economics of these opportunities."

In response to the delay in the final EIS, Patience told Petroleum News July 7: "We are concerned about the delay; however, it is premature to say this will have a direct impact on the project timeline without understanding what stipulations are included in the final EIS."

"A final decision to move forward on these projects won't be sanctioned until after the EIS is completed and permits are issued," Patience said.



JUDY PATRICK

The production facility at Alpine

—KRISTEN NELSON, Petroleum News editor-in-chief

## • NORTH SLOPE ALASKA

## Point Thomson owners to focus on gas project

Alaska arguing for complete evaluation of resource base at eastern North Slope unit in 2004-05 work plan

By KRISTEN NELSON

Petroleum News Editor-in-Chief

The state of Alaska's Division of Oil and Gas and the Point Thomson unit owners appear to be at odds over what the work focus should be at the unit over the next year.

There is no production at Point Thomson, which sits at the eastern edge of state lands on the North Slope, with leases adjacent to the Arctic National Wildlife Refuge. Because of an old agreement with the state of Alaska, original Point Thomson leases have been extended beyond their basic terms, awaiting a pipeline to connect the unit to the trans-Alaska pipeline at Prudhoe Bay. Major owners at Point Thomson are ExxonMobil, BP Exploration (Alaska), Chevron U.S.A. and ConocoPhillips Alaska.

A recent unit expansion, however, requires development drilling by June 2006 or the expansion leases revert to the state and a substantial fine — \$20 million — is due to the state to reimburse it for money it could have earned reoffering the expansion leases, those not held by the original agreement which delayed a production requirement until a pipeline was in place.

The owners submit a plan of development to the state each year, along with an update on the previous year's work.

## Owners want to focus on gas sales

A draft unit work plan for the upcoming year, October through September, submitted by Point Thomson operator ExxonMobil, proposes that 2004-05 work focus on "technical and commercial evaluations necessary to assure that the owners will be in a position to participate in any future open season for major gas sales from the North Slope of Alaska."

Specific work would include develop-

## Want to know more?

If you'd like to read more about the eastern North Slope's Point Thomson unit go to Petroleum News's Web site and search for these articles, published in the last year and a half. These are just a few of the stories in which Point Thomson is featured or significantly addressed.

Web site: [www.PetroleumNews.com](http://www.PetroleumNews.com)

## 2004

- April 25 TransCanada to reactivate 23 year old Alaska gas line right-of-way
- Jan. 25 Extending the Spine, with sidebar: State looking at road to Point Thomson project
- Jan. 25 Point Thomson owners opt to stay in game
- Jan. 4 ExxonMobil says Point Thomson not viable as standalone
- Jan. 4 A cloudy forecast

## 2003

- Dec. 14 Coming down
- Aug. 17 Alaska gas pipeline application in works
- Aug. 17 Point Thomson owners slow up project
- June 22 BP to mothball Badami
- June 22 AOGA: Kudos to Juneau
- Feb. 23 ANWR may be best bet to balance state budget
- Feb. 16 A step forward: Point Thomson now under wing of ExxonMobil Development

ing "a conceptual gas sales depletion plan," conducting "screening evaluations of Point Thomson gas sales production facilities" and doing any work necessary to support ongoing negotiations under the Alaska Stranded Gas Development Act.

Why the focus on gas?

The owners had been working on a plan

see OWNERS page 14

continued from page 3

## EIA

rels per day" or about 2.6 percent in 2004 and 2005, which "is likely to keep spot crude prices near current levels through next year." It had projected a "gradual, sustained decline in crude oil prices through 2005," the agency said, but now believes chances for that price decline "have diminished."

Its projected average price for West Texas Intermediate for the third quarter is now \$37 per barrel, about \$1 per barrel higher than previously projected. "Currently low world oil surplus capacity levels provide an extremely limited cushion in the event of unexpected world oil market disruptions," the agency said.

While there is "significant uncertainty" in demand and supply, "numerous concerns about potential oil supply difficulties remain," the agency said, including concerns around Iraq, threats to other Middle East producing assets, questions about Venezuela output capacity "and the capability of Russia to main steady supply increases going forward."

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• BEAUFORT SEA CANADA

# Canada to map Beaufort Sea

*Will spend C\$51 million over 10 years collected data on disputed seabed to make formal claim to sovereignty under United Nations convention*

By GARY PARK

*Petroleum News Calgary Correspondent*

Low-level tensions between Canada and the United States over sovereignty of an offshore sliver in the Beaufort Sea are moving from simmer to boil.

Canada has turned up the heat in the 30-year squabble by deciding to spend C\$51 million over 10 years to map the Arctic continental shelf and assert its sovereignty to the area under international law.

In the 2004-05 budget released in March, Ottawa said the data collected from the radar mapping "will lead to a formal submission under the United Nations Convention on the Law of the Sea and help secure Canada's sovereignty in the High Arctic."

With potentially rich oil and natural gas resources at stake, including 54 trillion cubic feet of natural gas in both the U.S. and Canadian Beaufort, the dispute is building now that the U.S. Minerals Management Service has indicated it will offer development licenses to the area, including about 16,000 acres

claimed by Canada.

Canada's Department of Foreign Affairs has sent a diplomatic note to Washington saying Canada rejects the U.S. effort to assert jurisdiction over the area.

## Cross-border volley last year

That follows a cross-border volley last year, when Canada formally protested the planned leasing out of the territory, even though the Minerals Management Service has indicated it would refrain from opening or processing bids for the disputed lands.

Herb Dhaliwal, Canada's natural resources minister at the time, said he remained confident that the United States would do the right thing and avoid wrapping up details to lease out the disputed four parcels.

"This is a disputed area. It's a disputed boundary. There has never been any leases committed to this area and we expect the U.S. will be consistent with that and, because it's a disputed area, there won't be leases put on that," he said.

Within the Department of Foreign Affairs, officials are adamant that the United States cannot impose its sovereignty unilaterally, but say Canada will continue to file diplomatic objections to keep its claim alive.

"It's a little dance we end up doing," one official told the *Globe and Mail*. ●

## NEWS IN BRIEF

### Cano acquires Ladder, includes 51 wells

Texas' Cano Petroleum had acquired Oklahoma's Ladder Energy for about \$2.2 million, Cano said July 6. The deal includes 51 producing oil and gas wells in the Rich Valley field comprising more than 4,500 acres. Current net production is about 110 barrels of oil equivalent per day. Reserves were estimated 682,000 barrels of equivalent, 30 percent of which is oil and 70 percent gas.

Cano said the acquisition amounted to \$3.23 per proven barrel of oil equivalent and that current pretax cash flow from the Ladder property is about \$80,000 per month. Cano said it expects to increase production on Ladder's existing wells through recompletions and remedial work with an anticipated eventual production of 200 barrels of oil equivalent per day. There also is a potential for drilling up to 16 additional wells and deeper drilling, the company said.

—RAY TYSON

## NEWS IN BRIEF

### Wyoming test well reaches target at 6,183 feet

Denver-based independent Kodiak Oil & Gas Corp. said July 6 that a well designed to test the gas potential of the Almond Formation coals and sands in Sweetwater County, Wyo., has reached a total depth of 6,200 feet.

Thirty-one sidewall core samples were recovered from the sands and the coals in the Almond formation as well as the coals from the shallower Lance and Fort Union formations, Kodiak said, adding that cores would be evaluated for gas content, permeability and porosity. Kodiak has a 40 percent working interest in the initial test well.

—RAY TYSON

### Omni completes acquisition of Trussco

Omni Energy Services Inc., based in Carencro, La., said July 1 that it has completed its acquisition of Trussco Inc. for \$10.5 million of cash, promissory notes and assumed debt.

Trussco provides cleaning services for the offshore petroleum industry. Omni performs seismic surveys and has helicopters that provide transportation services to the petroleum industry.

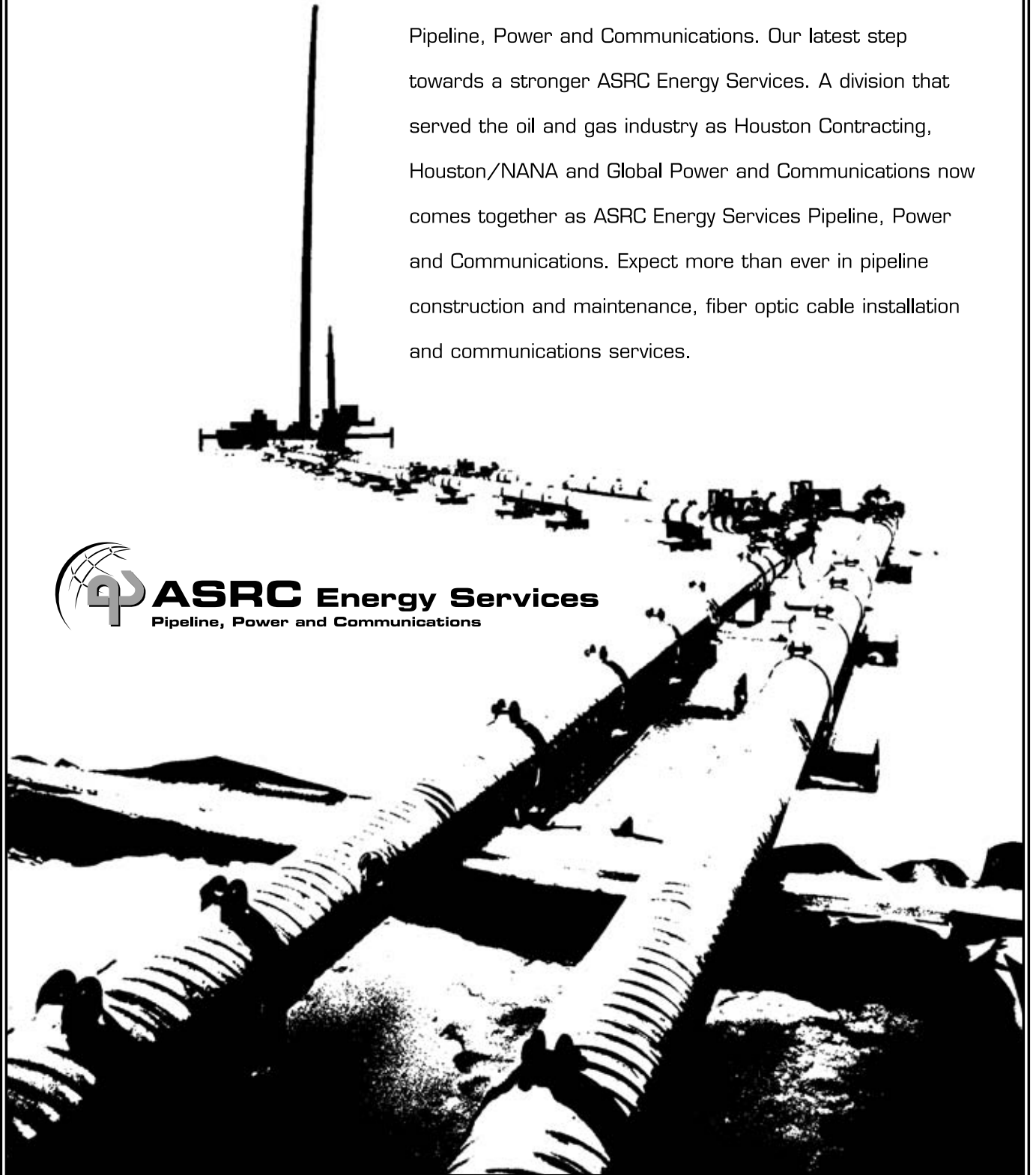
—THE ASSOCIATED PRESS

## CLARIFICATION

A five-kilowatt solid oxide fuel cell fired by natural gas, currently operating in Fairbanks and referred to in a story in the July 4 issue, was assembled by Ontario-based Fuel Cell Technologies Ltd. A five-kilowatt solid oxide fuel cell fired by propane, which has experienced operational problems at its test location near Exit Glacier, was assembled by Acumentrics, a Boston-area firm. The story was unclear about the manufacturer of the natural gas fuel cell.

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## OKLAHOMA CITY, OKLA.

### Kerr-McGee boosts capital spending to reflect merger with Westport Resources

Kerr-McGee says it is increasing its estimated 2004 capital program for oil and gas operations from \$900 million to \$1.1 billion, and its exploration expense from \$300 million to \$340 million, to reflect six months of combined company operations with recently acquired Westport Resources.

As a result of the merger, Kerr-McGee said it expects to reduce the new company's total debt as a percent of capitalization to about 42 percent by year-end.

The combined company's workforce also will be reduced by about 150 positions, resulting in a combined workforce of about 1,400 worldwide, Kerr-McGee said.

The merger, approved June 25 by the shareholders of both companies, increases Kerr-McGee's proved reserves by nearly 30 percent.

Kerr-McGee's executive management team members will continue in their current roles, and the company will retain the Kerr-McGee name and maintain its headquarters in Oklahoma City. The company's oil and gas operations will continue to be based in Houston, with primary regional offices in Denver; Dallas, Aberdeen, Scotland and Beijing.

—RAY TYSON, Petroleum News Houston correspondent

## HOUSTON, TEXAS

### Industry groups say government data initiative would cost producers millions

The cost of complying with a proposed government initiative designed to speed up the processing and accuracy of information would total \$15 million to \$21 million for the top 250 to 350 producers reporting the data, according to a joint statement released by six industry groups.

The new initiative was proposed by the Energy Information Administration, the statistical arm of the U.S. Department of Energy.

"The proposed reporting would require additional capital, programming, computer run time and employee costs," according to the joint statement by the Natural Gas Supply Association, the American Petroleum Institute, the U.S. Oil and Gas Association, the National Ocean Industries Association, the Domestic Petroleum Council and the Independent Petroleum Association of America.

The quality and timeliness of the existing statistics came into focus earlier this year when the U.S. Minerals Management Service released data for 2002 and 2003 of gas production in the offshore Gulf of Mexico that caused the EIA to revise its already published production figures sharply downward and also to lower its estimates.

—RAY TYSON, Petroleum News Houston correspondent



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COURTESY ALASKA PETOGRAPHY

## • LONDON, ENGLAND

# BP expects 17% jump in oil and gas output

### THE ASSOCIATED PRESS

**B**P PLC indicated July 2 that its profit would surge in the second quarter thanks to a 17 percent increase in its oil and natural gas output and to sharply higher sales prices.

London-based BP credited its Russian operations for all the predicted growth in oil and gas production during the three months ending June 30, in a trading statement issued ahead of quarterly financial results to be announced later this month.

BP expected oil and gas production — its main business — to average 3.95 million barrels of oil equivalent per day in the second quarter, up from 3.37 million barrels a year ago. At the same time, it noted a 36 percent rise in the benchmark Brent crude oil price over the past 12 months to US\$35.32 a barrel. U.S. prices for natural gas also rose.

Non-Russian production slipped compared to the first quarter, due to planned maintenance at facilities in Alaska, the

Middle East and the North Sea, along with an unplanned shutdown of its large Mars platform in the Gulf of Mexico and a seasonal ebb in European demand for gas.

However, BP's Russian joint venture TNK-BP, including Slavneft, pumped an average of 890 million barrels of oil equivalent per day in the second quarter, up 31 percent from last year.

Profit margins in BP's refining business fattened up as well, particularly on the U.S. West Coast where the so-called indicator margin jumped by 143 percent to US\$15.41 per barrel.

BP said this improvement in margins wouldn't necessarily show up in its refining sales, in part because of higher energy costs that aren't reflected in the indicator margins.

In its chemicals business, margins and volumes both rose from the first quarter, but gains compared to last year were offset by higher energy costs and the effects of fluctuating currencies, BP said. ●

*BP credited its Russian operations for all the predicted growth in oil and gas production during the three months ending June 30, in a trading statement issued ahead of quarterly financial results to be announced later this month.*

## BIRMINGHAM, ALA.

### Energen to acquire San Juan coalbed methane properties for \$273 million

Energen Corp. said its oil and gas acquisition and development subsidiary, Energen Resources, has signed a purchase and sale agreement to buy San Juan Basin coalbed methane properties from an undisclosed private company for about \$273 million. The effective date of the sale is Aug. 1, the company said June 29.

Located in the under-pressured Fruitland coal play, more than half of the estimated 250 billion cubic feet equivalent of proved natural gas and natural gas liquids reserves are behind pipe and undeveloped, Energen said, adding that natural gas accounts for about 80 percent of the reserves.

The company also estimates that there are up to 60 billion cubic feet of probable reserves.

"The properties represent an important expansion in one of our core areas of operation, the San Juan Basin," said James McManus, Energen Resources' president and chief operating officer.

Production from the acquired properties is expected to total 2.3 billion cubic feet of gas equivalent in 2004, 8.6 billion cubic feet in 2005, and 11.7 billion cubic feet in 2006.

The current net production rate is about 14 million cubic feet of equivalent per day. The company said production is expected to continue to build through 2009 and then decline gradually.

—RAY TYSON, Petroleum News Houston correspondent

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## NORTH AMERICA

### U.S., Canadian rig count numbers continue to mount

Both the U.S. and Canadian drilling rig counts continued to pick up momentum during the week ending July 2, increasing by a combined 88 from the previous week to total 1,598 rigs, according to rig monitor Baker Hughes. That also was an increase of 146 rigs compared to the same weekly period last year.

The number of rigs operating in Canada during the recent week alone rose by 63 rigs to 397 rigs versus the prior week and was up by 22 rigs compared to the same period last year.

In the United States, the overall rig count compared to the previous week increased by a 25 to 1,201, also an increase of 124 rigs versus the year-ago period. Compared to the previous week, land rigs alone increased by 22 to 1,085, while offshore rigs increased by three to 98. Inland water rigs remained unchanged at 18.

Of all rigs operating in the United States during the recent week, 1,031 were drilling for natural gas and 168 for oil, while two were being used for miscellaneous purposes. Of the total, there were 742 vertical wells, 326 directional wells, and 133 horizontal wells.

Among the leading producing states in the United States, Texas scored the largest gain in rigs versus the previous week, increasing by eight to 499 rigs. Wyoming picked up five rigs to total 85. Louisiana gained three rigs to total 170. Alaska's rig count increased by two to total eight while Oklahoma's increased by two to 167 rigs. California picked up one rig to total 25. New Mexico remained unchanged at 66 rigs.

—RAY TYSON, Petroleum News Houston correspondent

## COLORADO

### Colorado oil, natural gas production show steady rise

While total U.S. oil production is expected to fall this year, production in Colorado is on the rise.

State oil production is projected to reach 21.9 million barrels this year, up 2.8 percent from 2003 and up 7.4 percent from 2002, according to the Colorado Oil and Gas Conservation Commission.

U.S. production, meanwhile, is expected to reach 2.04 billion barrels, about 3 percent lower than the previous two years, according to the Energy Information Administration based in Washington, D.C.

Colorado, whose oil production contributes about 1 percent to the national total in oil production.

"It is very significant that after years of decline, Colorado's production of oil is showing an upward trend," said Brian Macke, the commission's acting director. "The uptick really is because of the increase in natural gas production in the Rockies," which has resulted in secondary oil production.

see **COLORADO** page 8

## NOVA SCOTIA

### Companies walking away from Nova Scotia prospects

Five operators allow 12 licenses to lapse; 10 more set to expire at year's end; hopes now hang on Marathon Canada well, Canadian Superior promise

By GARY PARK

Petroleum News Calgary Correspondent

It's not yet a full-scale stampede, but the sound of footsteps is building offshore Nova Scotia.

Unable to find buyers or other partners and unwilling to take the gamble themselves, five companies allowed a combined 12 exploration licenses carrying C\$280 million in work commitments to expire June 30.

The decision to walk away from the prospects is the biggest setback yet to a basin that has compiled a growing list of drilling failures that have dealt a heavy blow to the optimism of 1999 when permits worth C\$592.5 million were issued, spurred by the nearly completed Sable natural gas project.

After five years of evaluating the prospects, the

see **WALK** page 8



All is not lost. A Marathon Canada-led partnership is currently using the Deepwater Pathfinder semi-submersible to drill the Crimson K-81 exploratory well about 220 miles east of Halifax and is so far at about 11,800 feet on its way to 21,400 feet.

## ALASKA

### June North Slope output down 3 percent from May

Endicott, Prudhoe Bay lead decline; summer temperatures on slope affect production because compressors less effective at warmer temperatures

By KRISTEN NELSON

Petroleum News Editor-in-Chief

Alaska North Slope crude oil production averaged 934,443 barrels per day in June, down 3.34 percent from a May average of 966,869 bpd. The Alaska Department of Revenue noted that this June's average temperature of 44.31 degrees Fahrenheit at pump station No. 1 compares with a three-year average for June of 40.3 degrees F. Higher temperatures in the summer months result in reduced production, as compressors work less efficiently in warmer weather than they do in winter.



Daren Beaudou, BP Exploration (Alaska)

#### Endicott down 9.6 percent

The steepest production drop in June was at the BP-operated offshore Endicott field, the most easterly of the slope's producing fields, with production averaging 24,678 bpd in June, down 9.58 percent from a May average of 27,293 bpd.

BP Exploration (Alaska) spokesman Daren Beaudou told Petroleum News July 7 that "Endicott is gas compression limited." The field produces a lot of gas and water in relation to oil, he said, and the "high gas and

see **PRODUCTION** page 8



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continued from page 7

## COLORADO

### Gas production up 10 percent

The agency says Colorado is set to produce about 3 billion cubic feet of gas per day in 2004, up 10 percent from a year ago.

Despite rising oil production in the state, Colorado has not been among the top 10 oil-producing states since 1999. Production this year will fall far short of a record 61.2 million barrels in 1956.

Still, oil prices that are hovering at about \$37 a barrel could mean more drilling in the future, said Jim Volker, CEO of Denver-based Whiting Petroleum.

The current prices have made it attractive to drill even marginal or slow-producing wells, and prices above \$30 a barrel will boost drilling, he said.

"If a well produces 400 barrels a day, it pays off over 10 years — even at \$20 a barrel," Volker said. "But the wells in the Rocky Mountains last longer, from 10 to 30 years."

Other gas-rich states also are expected to have higher oil production this year while traditional oil fields in the Gulf of Mexico and Alaska are steadily declining.

Production in North Dakota is expected to rise 5 percent to 84,000 barrels a day, while Montana is expected to top 2003's 53,000 barrels a day.

—THE ASSOCIATED PRESS

continued from page 7

## PRODUCTION

water to oil production ratio ... was exacerbated by some miscible injectant compressor turbine problems."

The result, he said, was to "further restrict the gas-handling capabilities of the field," reducing oil production. The higher temperatures in June also "add to the compression constraints as well," he said.

Production from the BP-operated Prudhoe Bay field (which includes Midnight Sun, Aurora, Polaris, Borealis and Orion) averaged 431,444 bpd in June, down 6.53 percent from a May average of 461,562 bpd, a smaller percentage drop than Endicott, but a much larger per-barrel drop.

Beaudo said temperature and natural field decline were both factors at Prudhoe, with temperatures "up 15 degrees on average from May to June." Comparing June to May at Prudhoe, he said, "May was relatively light from a planned maintenance standpoint" compared to June. "June production was right on target with our expectations," Beaudo said.

Production from the BP-operated Lisburne field (including Point McIntyre and Niakuk) averaged 52,146 bpd in June, down 2.66 percent from a May average of 53,571 bpd.

### Northstar, Alpine also see reduced production

The Department of Revenue noted equipment-related production slowdowns at two fields.

There was a gas compressor repair at BP's offshore Northstar field beginning June 7, and estimated to take seven to 10 days, the department said. Production at the field did drop into the 50,000-bpd range twice during that time, but field production still averaged 72,875 bpd, down only 3.35 percent from the field's May

... temperature and natural field decline were both factors at Prudhoe, with temperatures "up 15 degrees on average from May to June." Comparing June to May at Prudhoe, "May was relatively light from a planned maintenance standpoint" compared to June.

"June production was right on target with our expectations." —

Daren Beaudo, BP Exploration (Alaska)

average of 75,424 bpd.

Revenue also noted what it called "a myriad of problems" at the ConocoPhillips Alaska-operated "Alpine field June 6-8 that were quickly repaired." Alpine, the most westerly of the North Slope's producing fields, averaged 102,864 bpd in June, down 3.45 percent from the field's May average of 106,543 bpd, with production dipping below the 100,000-bpd mark June 5-7 and again at the end of the month, June 28-29. Substantial work is under way at Alpine, and the field will be offline for about four weeks beginning in mid-July for upgrade work and major maintenance (see story in June 27 issue).

### Kuparuk, Milne, have increased production

Production from the ConocoPhillips Alaska-operated Kuparuk River field (which includes West Sak, Tabasco, Tarn, Meltwater and Palm production) averaged 197,275 bpd in June, up 2.76 percent from a May average of 191,984 bpd. The other North Slope field with increased production in June was the BP-operated Milne Point field, which averaged 53,161 bpd in June, up 5.29 percent from a June average of 50,492 bpd.

Cook Inlet production averaged 24,411 bpd in June, down 2.86 percent from a May average of 25,130 bpd. ●

continued from page 7

## WALK

five license-holders apparently decided they would be better paying the Canadian government 25 percent of what they had pledged to spend — minus any allowable expenses — rather than drill.

The leases now revert to the government and could be part of any future call for bids by the Canada-Nova Scotia Offshore Petroleum Board, although the regulator is moving cautiously, having dropped plans for a call for bids in June after reviewing industry nominations.

### ExxonMobil drops most licenses

Bailing out on June 30 were ExxonMobil, which had five licenses carrying work expenditures of C\$122 million; Shell Canada, with three at C\$94 million; Kerr-McGee Offshore Canada, two at C\$34 million; Imperial Oil Resources, one at C\$28.9 million and Richland Minerals, one at C\$1.2 million.

Paul McEachern, managing director of the Offshore/Onshore Technologies Association of Nova Scotia, told the Halifax Daily News that the decisions not to drill have more to do with corporate policy than unfavorable geology.

He was confident other companies would be eager to scoop up the surrendered licenses.

McEachern said he is more concerned with the amount of seismic activity and drilling actually taking place than with the number of blocks being leased.

The next test of the industry mood in offshore Nova Scotia comes quickly. Ten more licenses are due to expire Dec. 31

and so far none of the holders has given any hint of drilling.

### Three operators have leases expiring at end of year

Of those 10, EnCana has five with C\$43.2 million in commitments; Richland Minerals has three at C\$5.4 million and Kerr-McGee Offshore, two at C\$7.6 million.

Of the batch awarded with a Dec. 31 deadline, only one was drilled — EnCana's Margaree F-70 well which is part of its possible gas reservoir for developing the Deep Panuke find.

A nine-day production test last year of the 100 percent-owned Margaree well flowed at 53 million cubic feet per day from a gas-bearing pay zone of 230 feet, but EnCana is still weighing the economics of proceeding with Deep Panuke, having withdrawn its original application.

But not all is lost in the basin. A Marathon Canada-led partnership is currently using the Deepwater Pathfinder semi-submersible to drill the Crimson K-81 exploratory well about 220 miles east of Halifax and is so far at about 11,800 feet on its way to 21,400 feet.

The well is about 5 miles east of Marathon's Annapolis G-24 discovery in 2002 in a parcel the operator hopes might hold 5 to 15 trillion cubic feet.

Undaunted by the refusal of its 50 percent partner El Paso to approve testing of the Mariner I-85 well earlier this year, Calgary-based junior Canadian Superior Energy, buoyed by results from the Mariner well, is still intent on drilling a second exploratory well, aiming for a fall return to the block. ●

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• NORTH SLOPE ALASKA

# Canadian firms eye Alaska investments

Canadian Natural, Devon Canada look at North Slope oil and gas opportunities

By KAY CASHMAN

Petroleum News Publisher & Managing Editor

Shell and St. Mary Land & Exploration aren't the only companies taking a close look at investing in Alaska oil and gas prospects. (See part one of this story in the July 4 edition of Petroleum News.) This year four Canadian oil and gas firms are either taking a hard look at acquiring acreage on the North Slope or have significantly expanded their slope acreage.

The companies include Canadian Natural Resources, which currently has no acreage in Alaska; Devon Canada, which has a minor acreage position; and Talisman Energy's U.S. subsidiary, Fortuna Energy, and Petro-Canada, which both increased their North Slope land position in June.

According to officials within the four companies, their interest in the state has been spurred by three things.

At the top of the list is the Murkowski administration's campaign to attract new oil companies to Alaska, which has involved a serious marketing push by the Alaska Division of Oil and Gas. Mark Myers, division director, said the administration's obvious sincerity, backed up by new incentives such as exploration tax credits, has been a key factor in the agency's success.

"They can't help but see there is high level support," he said, especially in the area of exploration.

The agency has also been "more focused" in its presentations outside Alaska, which, among other things, included booths at the American Association of Petroleum Geologists conference in Houston this past spring, and the North American Prospectors Expo Feb. 4-6 and a visit to Calgary to meet with oil companies there, Myers said. (The Calgary expedition included Alaska officials from the U.S. Minerals Management Service and the Bureau of Land Management.)

Second, but equally important, have been the efforts of North Slope leaseholders Armstrong Oil & Gas, ConocoPhillips, Alaska Venture Capital Group, Anadarko Petroleum and others to find partners for their slope prospects. (In the last two years Armstrong brought Pioneer Natural Resources and Kerr-McGee to the state.)

Third is the interest among a growing number of companies to find new oil and gas reserves in geologically prospective regions.

## Canadian Natural Resources "kicking the tire around"

Corey Bieber in investor relations at Canadian Natural Resources, Canada's second largest natural gas producer after

EnCana, confirmed his firm recently sent several people to Alaska to look at oil and gas investment opportunities on the North Slope.

The visit, he told Petroleum News in late June, was spurred by an interest the independent has in oil and gas drilling opportunities "anywhere in the world" and by the visit and presentation from state and federal government officials earlier this year to drum up interest in Alaska.

"Norway is doing the same sort of thing," Bieber said. "I think when governments do that sort of thing it certainly prompts companies to take a look at what they have to offer."

In Alaska, he said, "we're sort of kicking the tire around" to see what's there.

Currently, the Calgary-based independent has operations in western Canada, the North Sea and offshore West Africa. The firm has acquired nearly C\$300 million in additional oil and gas assets in western Canada in the last three months and plans to spend C\$2.55 billion on the conventional side this year, up from its original C\$2.29 billion following its recent C\$467 million acquisition of heavy oil producer Petroverra Resources.

That has boosted Canadian Natural's oil output forecast for the year to 283,000 barrels per day from 263,000 bpd, with gas unchanged at 1.32-1.395 billion cubic feet per day.

The company is targeting a 5 percent increase in gas production in 2004, boosted by better-than-expected results from a shallow-gas program in the Helmut area of British Columbia.

## Devon in scoping mode

Houston-based independent Devon Energy sent a representative to Alaska from its Canadian subsidiary, Calgary-based Devon Canada, last fall and again in late June. A northern front-runner in Canada's Mackenzie Delta, Devon Canada already has a 10 percent interest in two leases in the eastern North Slope's Point Thomson unit. The adjoining leases are in the western quarter of the unit.

Devon Energy has a 5 percent working interest in the ConocoPhillips-operated Starichkof unit which contains the Cosmopolitan prospect in Alaska's Cook Inlet basin. But both leaseholds were inherited from acquisitions or mergers and, aside from these minor positions, Devon has not been involved in Alaska's oil industry.

In a July 8 interview with Petroleum News, Michel Scott, Devon Canada's vice president, frontiers, said the company was in "scoping mode" in Alaska.

"There appears to be some synergy" between Alaska's North Slope and Devon's interest in the Mackenzie Delta, he said.

"Last fall we sent a small group of G&G, logistics and regulatory folks to Alaska to get an idea of the lay of the land. Things are changing there. Also as a northern operator we like to know what's happening in other jurisdictions," Scott said.

No decisions to expand Devon's presence in Alaska have been made to date, he said, but "if something makes sense, it could be an area we could get more active in." •

*Editor's note: The third part of this story will contain an update on the North Slope acreage expansion of both Petro-Canada and Talisman Energy's U.S. subsidiary, Fortuna Energy.*



Mark Myers, Alaska Division of Oil & Gas

## WYOMING

### Popular Bridger-Teton forest hiking area being considered for oil, gas lease

An area around a popular Bridger-Teton National Forest hiking trail in Wyoming is being considered for oil and gas exploration.

Forest officials say the recreational value of the Cliff Creek Falls trail will be considered in deciding whether to issue any permits. And a permit must still be sought even if a lease is granted.

Environmentalists contend that the proposed leasing of 100,000 acres is overkill in northwest Wyoming, where 76 percent of available land in Sublette County is already slated for drilling.

Dru Bower, vice president of the Petroleum Association of Wyoming, said the area is appropriate for oil and gas drilling.

"This is on the southern portion of the BT, in an area where there is already development," she said.

The area is in the Big Piney Ranger District between Alpine, Bondurant, Willow Creek to the north and south to Barge Creek and Riley Ridge. Most of the area has soil that is unsuited for drilling or is too steep. Other portions have wildlife restrictions, such as for elk calving.

—THE ASSOCIATED PRESS

## GULF OF MEXICO

### Current Deepwater Activity

Operator	Area/Block	OCS Lease	Rig Name	Prospect Name	Water Depth (ft)
BP Exploration & Production Inc.	WR 724	G17011	OCEAN CONFIDENCE	Das Bump	7,591
Shell Offshore Inc.	MC 657	G08496	R&B FALCON NAUTILUS	Coulomb	7,565
Chevron U.S.A. Inc.	WR 759	G17016	TSF DISCOVERER DEEP SEAS	Jack	6,965
BP Exploration & Production Inc.	GC 743	G15606	TSF DEEPWATER HORIZON	Atlantis(GC)	6,829
Union Oil Company of California	KC 681	G20949	DISCOVERER SPIRIT	East Sardinia	6,345
BP Exploration & Production Inc.	MC 778	G09868	TSF DISCOVERER ENTERPRISE	Thunder Horse South	6,040
Dominion Exploration & Production, Inc.	MC 773	G16647	PRIDE 1503	Devil's Tower	5,610
BP Exploration & Production Inc.	YK 962	G15445	DIAMOND OCEAN AMERICA	Swordfish	4,677
Spinnaker Exploration Company, L.L.C.	MC 124	G24049	GLOMAR JACK RYAN	Zorin	4,479
BHP Billiton Petroleum (GOM) Inc.	GC 653	G20084	GLOMAR C. R. LUIGS	Sherzi	4,340
Anadarko Petroleum Corporation	GC 608	G18402	NABORS POOL 140	Genghis Khan	4,287
Anadarko Petroleum Corporation	GC 518	G21801	NOBLE PAUL ROMANO	K2 North	4,049
Chevron U.S.A. Inc.	GC 640	G20082	FALCON DEEPWATER MILLENNIUM	Tahiti	4,017
Eni Petroleum Co. Inc.	GC 562	G11075	GLOMAR CELTIC SEA	K2	3,933
Kerr-McGee Oil & Gas Corporation	EB 688	G09191	DIAMOND OCEAN STAR	Boomvang (East)	3,786
BP Exploration & Production Inc.	YK 915	G08894	NOBLE JIM THOMPSON	Dorado	3,460
Shell Offshore Inc.	GC 248	G15585	NOBLE MAX SMITH	Glider	3,440
Murphy Exploration & Production Company	GC 338	G21790	NOBLE AMOS RUNNER	Front Runner	3,278
Eni Petroleum Co. Inc.	GC 254	G08010	DIAMOND OCEAN VALIANT	Allegheny	3,225
Shell Offshore Inc.	YK 956	G06896	H&P 205	Ram-Powell	3,214
Kerr-McGee Oil & Gas Corporation	GB 668	G17408	NABORS MODS RIG 150	Gunnison	3,152
TOTAL E&P USA, INC.	MC 243	G19931	SUNDOWNER XVI	Matterhorn	2,816
Chevron U.S.A. Inc.	GC 205	G05909	NABORS 85 (MAYRONNE 162)	Genesis	2,590
Water Oil & Gas Corporation	MC 583	G16624	DIAMOND OCEAN LEXINGTON	Killer Bee	2,487
Murphy Exploration & Production Company	MC 582	G16614	MODS 141	Medusa	2,214
LLOG Exploration & Production Company	GB 415	G24491	DIAMOND OCEAN SARATOGA		1,960
Kerr-McGee Oil & Gas Corporation	GB 244	G15860	TRANSOCEAN MARIANAS	Basal Peak	1,946
Chevron U.S.A. Inc.	YK 786	G10944	ENSCO 25	Petronius	1,754
El Paso Production GOM Inc.	EW 1003	G06921	SUNDOWNER XI	Prince	1,483
BP Exploration & Production Inc.	MC 109	G05825	H&P 203	Amberjack	1,030

Total Deep Water Prospects with Drilling/WO Activity 30

### New Deepwater Activity

Union Oil Company of California	KC 681	G20949	East Sardinia	6,345
Murphy Exploration & Production Company	GC 338	G21790	Front Runner	3,278
LLOG Exploration & Production Company	GB 415	G24491		1,960

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## BAYTOWN, TEXAS

### Largest U.S. refinery, ExxonMobil at Baytown, ramps up security

The largest refinery in the United States increased its security measures this holiday weekend based on a vague warning from the FBI.

The ExxonMobil refinery in Baytown, Texas, set on the Houston Ship Channel, said a weekly security bulletin released to local law enforcement agencies "expressed concern about the threat of terrorist attack within the (United States) during the July 4th weekend. Intelligence reporting indicates a wide range of possible infrastructure targets, including refineries. Law enforcement agencies were asked to remain vigilant." The Baytown Sun received a copy of an internal ExxonMobil warning that said the company "elected to take more aggressive action in its security profile" after talking to the Department of Homeland Security.

Extra security means more vehicle searches, gate closures, more guards, restriction of non-employee visitors and an increased presence of Baytown police at entrances and around the perimeter, the company notice said. This week's industry warnings were not based on any specific threats, FBI spokesman Bob Doguim said. Rather, they are part of continuous vigilance based on earlier warnings of a possible domestic terrorist strike before Election Day in November.

—THE ASSOCIATED PRESS

## TACOMA, WASH.

### Government: Washington refinery may be on terrorists' hit list

The Department of Homeland Security says one of Washington's five oil refineries may have come under surveillance by terrorists, a newspaper reported July 1. While the suspicious activity could be part of preparation for an attack, the agency said there was no specific information suggesting energy facilities were being targeted.

Word on the possible surveillance was in a department bulletin sent to industry, state and local law enforcement officials, The News Tribune of Tacoma reported.

A person in a kayak "was observed videotaping a Northwestern U.S. company's refinery," it said. The company's security staff also reported a "suspicious encounter" with a diver last year in the same general area.

The bulletin noted that a key ring containing about 50 keys was stolen from a field truck owned by a company with a Northwest refinery. The keys represent "potential access" to the company's U.S. facilities, the agency said, noting that locks at the local operation were being changed.

Washington's other refineries are Shell and Tesoro operations in Anacortes, a ConocoPhillips refinery in Ferndale and a U.S. Oil refinery in Tacoma.

The Homeland Security bulletin noted there have been a series of terrorist attacks on energy-related targets overseas, particularly in the Persian Gulf.

—THE ASSOCIATED PRESS

## • NORTH AMERICA

# California firm joining Alberta oil sands rush

Company turning two Alberta pipelines into part of new corridor to U.S. Rocky Mountain refineries; strong believer in synthetic crude future

By GARY PARK

Petroleum News Calgary Correspondent

**P**acific Energy Partners, a California-based mid-stream company, is turning a toehold into a foothold as it secures a position in the transportation of oil sands crude from Alberta.

The master limited partnership concluded its C\$31.5 million purchase of the 7,000 barrel-per-day Mid Alberta Pipeline from Imperial Oil on June 30 just a month after finalizing a C\$156 million acquisition of BP Canada's 38,000 bpd Rangeland pipeline system.

It now plans to combine the two lines which serve as a gathering network for rapidly declining conventional crude production in central and southern Alberta.

Pacific Energy said it will convert the new entity into a mainline carrying synthetic crude from

Edmonton to the U.S.-Canada border, where it will feed into the company's U.S. Rocky Mountain pipelines that serve 14 refineries, with combined capacity of 600,000 bpd.

"Producers in Alberta and refiners in the U.S. Rocky Mountain region have already shown great interest in this new pipeline corridor," Pacific Energy chief executive officer Irv Toole said in a statement.

"Producers have a need to find additional outlets for their growing oil sands production and refiners need to replace supplies of conventional crude oil that are declining," he said.

### Upgrades to meet western U.S. refinery specifications

Toole said oil sands producers have invested heavily in upgrading and customizing their synthetic crude oil blends to meet specifications for western U.S.

see RUSH page 11

## • FAIRBANKS, ALASKA

# Natural gas distribution system to be expanded tenfold

Texas firm buying Fairbanks Natural Gas from Northern Eclipse, plans 115 miles of new distribution lines, expansion to 5,800 customers by 2013

By KRISTEN NELSON

Petroleum News Editor-in-Chief

**M**any more Fairbanks businesses and residents will have access to natural gas within a decade, if a proposed purchase of Fairbanks Natural Gas is approved by the Regulatory Commission of Alaska.

Pentex Alaska, a newly formed, closely held, Texas corporation, has filed with the commission to acquire the 100 percent controlling interest in Fairbanks Natural Gas now held by Northern Eclipse LLC, and has told the commission that its plans

include expanding service to some 5,800 customers by 2013, at an estimated cost of more than \$35 million in new facilities. Pentex told the commission in its application that its proposed acquisition of Northern Eclipse "will allow substantially greater investment in natural gas utility plant in Fairbanks" and benefit existing and new customers, in the long term, "because increased investment in natural gas facilities will result in lower average costs for both current and future natural gas customers."

The commission said June 30 that Fairbanks

see DISTRIBUTION page 11

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continued from page 10

## DISTRIBUTION

Natural Gas is the holder of certificate of public convenience and necessity No. 514, and provides natural gas distribution service to some 580 customers in Fairbanks. Fairbanks Natural Gas liquefies Cook Inlet natural gas and trucks it to Fairbanks as liquefied natural gas, where it re-gasifies it and distributes it to customers.

The Pentex application, dated June 10, also requests expedited consideration, allowing Fairbanks Natural Gas "to step up its expansion efforts in the latter part of this summer construction season, and also to effectively plan now for a more substantial expansion next summer."

### Britton would continue as president and CEO

The major shareholders of Pentex Alaska are also the major shareholders of Pentex Natural Gas Co. and other energy ventures. Pentex Natural Gas has operations in Pennsylvania, where it provides natural gas transportation services. Mark Casaday of Phoenixville, Pa., a petroleum engineer, is president and chief executive officer of Pentex Alaska Natural Gas Co. Thomas Muse, a Texas resident, a chemical engineer, is vice president of Pentex Alaska, and was a member of the management board of Northern Eclipse from 1996 until early 2004.

Pentex said Dan Britton, president and chief operating officer of Fairbanks Natural Gas, will continue to handle the company's operation after the acquisition.

Funds for the acquisition will be raised through private placement of approximately \$20 million in senior lien revenue notes to institutional investors, with approximately one-half of the notes to be taken by Northern Eclipse, Pentex said. Approximately \$15 million will be either paid to Northern Eclipse at the time of closing or allocated to repayment of obligations to Northern Eclipse. Almost \$1 million will be set aside for working capital and miscellaneous reserves and expenses.

Pentex said \$2 million is budgeted for capital expenditures during 2004 and 2005, and the company intends to make future similar private placements fund continued growth: \$8 million in 2005, \$11 million in 2006 and \$8 million in 2007.

### \$35.3 million in expansions

These monies, along with cash from operations, will fund \$8 million in investments for additional LNG plant capacity, \$8.4 million for additional LNG storage facility and \$18.9 million for an additional 115 miles of main and service lines.

Pentex said its goal is to have main extensions completed in 2008, and increase in LNG manufacturing capacity and storage capacity will be timed to keep pace with additional customers.

Once the sale is complete, Fairbanks Natural Gas will continue to purchase LNG, store and vaporize the gas and distribute it to customers. The only change, Pentex said, is that Fairbanks Natural Gas will purchase the LNG from Pentex Alaska, rather than from Northern Eclipse.

Pentex said it will initially employ all current employees of both Fairbanks Natural Gas and Northern Eclipse and has no plans to eliminate any current position. Since it intends to invest heavily in expansion, additional employees will be required, especially during the summer construction season, the company said.

### Fairbanks Natural Gas certified in 1997

Fairbanks Natural Gas was certificated to provide natural gas service in Fairbanks in

1997, and has made a considerable investment in a distribution system, Pentex told the commission. It said that because of the significant cost of building the distribution system, and because most potential customers already have an energy supply, "revenues were expected to significantly follow the associated investment," and the company "is just now at a point where revenues have caught up enough to support operational costs."

Pentex said long-term prospects for Fairbanks Natural Gas "are very favorable, but in the short term substantial additional investment is needed" to keep the company growing.

Because of significant current construction in Fairbanks, there are a number of customers who want natural gas this year, including Lowes, Lithia Motors, Fred Meyer, the Fairbanks School District and new residential complexes, Pentex said. Fairbanks Natural Gas has received inquiries for gas service from 175 new customers which "will require substantial ongoing investment of funds" which Fairbanks Natural Gas does not have.

Pentex said its acquisition will ensure that Fairbanks Natural Gas "has the financing to provide new and ongoing service to all potential customers who want service in 2004."

In the mid-term, Pentex said, Fairbanks Natural Gas has discussed providing natural gas to the University of Alaska Fairbanks, but "without an influx of new capital" the company will not be able to expand its service areas to the university.

And while Fairbanks Natural Gas currently serves 580 customers, "its long-term plan forecasts serving approximately 6,000 customers," requiring substantial investment. Pentex said 115 miles of additional distribution infrastructure will be required, with an investment in main and services lines alone projected at more than \$18 million, an aggressive expansion plan which would result in Fairbanks Natural Gas having a customer count of some 5,800 by 2013.

Once the acquisition is complete, Pentex said, Fairbanks Natural Gas "will target the addition of approximately 30 miles of distribution main per year, along with the service lines required to achieve the desired customer growth."

The Regulatory Commission of Alaska is accepting comments through July 30. ●

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## CALIFORNIA

### Assembly urges Shell not to close refinery

The California Assembly urged Shell Oil Corp. July 2 to keep open a Bakersfield refinery that's scheduled to close in October.

The resolution, by Assemblywoman Christine Kehoe, D-San Diego, urged the company to keep producing diesel and gasoline until the end of this year to allow a buyer to be found for the aging plant. Shell officials say the refinery is being closed because the crude oil from the Kern County oil fields is drying up.

The resolution passed on a voice vote, but not before extended debate among Assembly members about whether the state should be involved.

Assemblyman Tom Harman, R-Huntington Beach, opposed the nonbinding resolution, saying the company had given nearly a year's notice that the refinery would be shuttered. State officials should be concerned with the Bakersfield plant because it will affect California's fuel supplies, said Assemblywoman Hannah-Beth Jackson, D-Santa Barbara. The refinery produces about 2 percent of the state's gasoline and 6 percent of its diesel supply — and the timing of the shutdown will fall just when farmers need more fuel for harvest, she said.

In committee testimony, Assemblyman Dennis Mountjoy said lawmakers heard the company planned to demolish the plant and not offer it for sale.

—THE ASSOCIATED PRESS

continued from page 10

## RUSH

refineries.

"We expect this new pipeline corridor (to the Rocky Mountain refineries) to be successful because it will allow Pacific Energy to participate in a meaningful way in meeting the increasing crude oil requirements of U.S. Rocky Mountain refineries by accessing new synthetic oil supplies in Edmonton."

In light crude service, the Mid Alberta pipeline has capacity of about 50,000 bpd, while Rangeland can carry 85,000 bpd to the international border — three times the current utilization.

Pacific Energy also said that over the

next year it will build a new initiating terminal with multiple pipeline connections in Edmonton.

The California pipeline has made its entry at a time when two of Canada's largest carriers, Enbridge and Terasen, are exploring a variety of plans to deliver more oil sands volumes to the U.S. and the British Columbia coast, some for possible export to Asia.

Oil sands producer Suncor Energy also bought a ConocoPhillips refinery in Denver a year ago and is retrofitting the 62,000 bpd plant as a U.S. outlet for its production.

The momentum to step up the provision of downstream facilities comes from forecasts that oil sands production will grow to 80 percent of Alberta's total oil output within a decade. ●

  
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## ● NORTH AMERICA

# Industrial gas use headed for 30 percent drop

Consultant expects overall consumption to grow by 1.7% a year through 2010

By GARY PARK

Petroleum News Calgary Correspondent

Natural gas consumption in the United States and Canada will increase by 1.7 percent a year through 2010, despite a 30 percent slump in industrial use, Calgary-based consultant Ziff Energy Group forecasts.

Gas-fired power generation will lead the increase at a rate of 7.5 percent a year, consuming the equivalent of all the gas produced in the Gulf of Mexico by the end of the decade, Ziff senior associate Ed Porter told a June seminar on North American gas supply.

He said gas holds the key to near-term growth of North American power generation because coal-fired plants take five years to come on stream and nuclear plants need about 10 years.

For instance, Porter said, gas is the only option for Ontario if the provincial government delivers on its promise to shut coal-fired plants by the end of 2007.

Currently, those plants generate 7,500 megawatts of electricity, consuming about 800 million cubic feet per day of Ontario's total gas needs of 2.6 billion cubic feet per day.

Porter doubts that the so-called clean-coal technology

will be able to compete with gas-fired power any time in the next five to 10 years.

## Industrial demand for gas down

On the industrial front, he said industrial demand for gas has taken a dive following a move offshore by companies that use gas as feedstock and fuel, or a switch to other fuels.

Petrochemical and fertilizer firms are being lured to countries such as Trinidad and Qatar that offer cheap, stranded gas.

If the Ziff estimates are accurate, industrial consumption will drop about 30 percent over 13 years from a peak 25.5 billion cubic feet per day in 1997.

Ziff Vice President Bill Gwozd predicted that liquefied natural gas imports to North America could reach 6 to 7 billion cubic feet per day, meeting 9 to 10 percent of North American needs, a major surge from today's 1 billion cubic feet per day.

He estimated the delivered cost of gas from both Alaska's North Slope and Canada's Mackenzie Delta would be cheaper than the US\$2.75-\$3.50 needed to deliver a million British thermal units of LNG to North America.

But Ziff President Paul Ziff warned that except for the U.S. Rocky Mountain region, North American basins face a challenge meeting demand.

He expected gas well completions in the Western Canada Sedimentary Basin will total between 11,000 and 16,500 this year, compared with less than 5,000 in the mid-1990s.

But average productivity in the basin has fallen by about 6 percent a year over the past decade based on about 86,000 wells, Ziff said.

## Canada's top producers not replacing production

The consultant's study of Canada's top 30 producers found they replaced 90 percent of production in 2003, but, after negative reserve revisions, the replacement level dropped to 59 percent.

Even Ziff's conclusion that natural gas is the best bet for power generation has been questioned by Nancy Southern, president of Canadian Utilities, one of Alberta's leading utilities.

She predicted in mid-May that power station builders will try to switch fuels for their next projects after an 88 percent drop in the first quarter between the price fetched by a megawatt hour of power and the cost of gas burned in the generation process.

Southern said the Alberta oil sands, a major gas consumer, could also produce its own alternative fuel.

She said the next generation of oil sands producers may use discarded bitumen byproducts to replace gas for their power and processing plants.

Calgary-based investment dealer Peters & Co. said in a newsletter that coal is on the verge of a comeback as a low-cost fuel alternative for new power projects in the United States. ●

## ● MOSCOW, RUSSIA

# Yukos receives default notice on US\$1 billion credit

## THE ASSOCIATED PRESS

The Russian government could theoretically restructure the Yukos oil giant's 99.4-billion-ruble (US\$3.4 billion) back taxes bill, a senior official said July 6, sending the company's shares temporarily up 22 percent.

"I am speaking in a clear hypothetical

sense, that theoretically such a possibly could be realized," said Deputy Finance Minister Sergei Shatalov, who is responsible for tax issues, according to Russia's Interfax news agency.

He added that this was his personal opinion, and that he wasn't aware of any talks between Yukos and the Finance Ministry.

Shatalov said the Finance Ministry would

*The Kremlin has claimed repeatedly that the actions against Yukos and its jailed former CEO Mikhail Khodorkovsky are part of a broader drive against economic crime and corruption*

have to make such a decision by August before a new law comes into force "under which the repayment in installments can be decided exclusively by the tax authorities," the ITAR-Tass news agency reported.

Shatalov's comments — although vague — sent Yukos' shares soaring on the RTS index from 188 rubles (US\$6.21) to 230 rubles (US\$7.93). But Shatalov noted that such a decision to restructure would be "difficult" because it violates the principles and rules of the game, Interfax said.

"It is very important to draw the line somewhere," Shatalov was quoted as saying. Making a special case for Yukos would require a special resolution and would be "to a large degree political," he said.

## Bankruptcy feared

A senior Yukos official had warned July 5 that the government was driving Russia's largest oil producer to the brink of insolvency after a group of Western banks, led by Societe Generale, issued notification that they could call in a US\$1 billion loan to Yukos.

In addition to the crippling tax bill for 2000, the Russian government has frozen Yukos' assets, giving it no way to raise money to pay the bill. Additionally, the Tax Ministry issued another 98 billion-ruble (US\$3.3 billion) back taxes bill to Yukos for 2001. Prosecutor General Vladimir Ustinov said on Russia's Ekho Moskvy radio July 6 that more back taxes claims were likely to follow for the years 2002 and 2003, the Interfax news agency reported.

"It's a snowball," Ustinov was quoted as saying. "This case has a beginning, but it is very difficult to see the end."

The Kremlin has claimed repeatedly that the actions against Yukos and its jailed former CEO Mikhail Khodorkovsky are part of a broader drive against economic crime and corruption.

But observers see the company's woes as being the direct result of Khodorkovsky's alleged political aspirations and his funding of opposition parties ahead of last December's parliament elections.

Since the probe against Yukos began a year ago, the company has lost about half its market value.

President Vladimir Putin said last month that the government isn't interested in seeing Yukos driven into bankruptcy. But analysts have speculated that the company's only chance for survival is if Khodorkovsky and his associate Platon Lebedev — who like Khodorkovsky is jailed on charges of fraud and tax evasion — and other key shareholders relinquish their shares. ●

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## Business Spotlight

By PAULA EASLEY



FORREST CRANE

John Amundsen, health, safety & environment manager

### Forest Oil Corp.

This aggressive independent oil company has large lease holdings in Cook Inlet, Susitna Valley and Copper Valley. Forest Oil partners with Unocal in numerous Cook Inlet facilities. The company has successfully pursued recent acquisitions and mergers with other oil companies to increase its holdings. Forest operates the West McArthur River Unit and the Redoubt Shoals Unit, including the Osprey Platform.

John Amundsen has worked in the HSE field for 32 years, the last seven with Forest Oil, which merged with Forcenergy. He most enjoys the solid relationships developed over the years with Alaska's competent regulatory people, as well as industry folk. On the extracurricular side, he and his wife Susan travel when he's not flying a plane, hunting, fishing or diving.



FORREST CRANE

Thomas Freeburg, director of operations

### Evergreen Helicopters of Alaska Inc.

Evergreen Helicopters began Alaska operations in 1961 and has grown into a large, diverse organization (747, DC-9 fleet, three helicopter companies, orchard, winery, museum, nursery, etc.). The company operates CASA 212s, Lear 35s, BE 200s, Bell 212s, (205, 206 series), and Eurocopter BK 117s, (105 and AS 350 series) for a variety of state/federal government contracts. It also provides rotary and fixed wing service.

Tom Freeburg joined Evergreen 7 years ago as director of operations after flying helicopters in Vietnam and the Gulf of Mexico, air ambulance services, and for mining/tourism operations in Southeast Alaska. Off-time finds him flying, restoring old cars or woodworking. Dad's advice to his and wife Kathryn's children, 27, 23 and 17 (all living in Alaska): "Whatever you focus on grows."

## MOSCOW, RUSSIA

### BP signs deal for drilling off Sakhalin

BP has signed an operating and shareholding deal with Russian state oil company Rosneft that clears the way for drilling at their Sakhalin-5 project, off the northeastern tip of Sakhalin Island, Reuters reports. BP earlier had signed an agreement giving it 49 percent of the project, with the Russian state corporation holding the majority share.

A spokesman for BP in Moscow told Reuters that "drilling will begin in the nearest future." The London-based company has agreed to finance all the development costs for Sakhalin-5, estimated at \$2.5 billion to \$5 billion over the next 10 years.

The find is expected to be huge. But there are no guarantees, and the same joint venture partners abandoned exploratory holes at two blocks in the Sakhalin-4 sector recently after disappointing results.

Sakhalin development is expensive and difficult, especially in the northern area. Sakhalin-5 is in the often ice-choked and technically challenging waters of the Sea of Okhotsk. BP says its 30 years of experience in Alaska give it an edge in producing oil in such a climate.

But the summer window is a short one, and the drilling will have to begin soon if it's to be done this season.

In June, BP and Rosneft said they would use Transocean's semi-submersible Sedco 600 for the first well, in water more than 300 feet deep. The rig had been taken to Singapore earlier for a \$2 million overhaul, and was expected in Sakhalin last month.

The companies are planning to target a structure called Pela Leich in the Kaigansky-Vasvukansky block with up to five exploratory wells. Subcontractors were already lined up at that time. They are expected to include Schlumberger, SakhalinSelfServis, AmRusTrans RFI, and others.

Rosneft received an exploration license for the project in 2002, covering blocks in the southern part of the Sakhalin-5 totaling about 10,000 square kilometers.

—ALLEN BAKER, Petroleum News contributing writer

*Sakhalin development is expensive and difficult, especially in the northern area. Sakhalin-5 is in the often ice-choked and technically challenging waters of the Sea of Okhotsk.*

continued from page 4

## OWNERS

to produce the high-pressure condensate at Point Thomson, separate out and ship the liquids, and reinject the gas. Work was begun on a federal environmental impact statement, but that work and permitting activities were suspended in the third quarter last year when the owners concluded that they could not "identify a viable gas injection project under current fiscal terms."

The cost for producing and reinjecting the high-pressure condensate was too great.

The owners tried to identify a smaller gas injection project which would be viable, "in light of a smaller condensate resource," and although "significant" cost reduction potential was identified, the reductions were not enough to make a gas injection project viable, "and further engineering work on the resulting cost reduction case ... was suspended," the companies said in their review of the 2003-04 work plan.

The Point Thomson owners reviewed confidential cost data with the Department of Natural Resources in April and May.

### State wants other alternatives studied

The Department of Natural Resources made substantial changes in the Point Thomson owners' draft proposal. A final plan proposal was not available as Petroleum News went to press July 8.

The state added work to the draft proposal.

It does not want the owners to focus solely on a gas sales project, but wants them to "evaluate all potential resources

*The owners tried to identify a smaller gas injection project which would be viable, "in light of a smaller condensate resource," and although "significant" cost reduction potential was identified, the reductions were not enough to make a gas injection project viable, "and further engineering work on the resulting cost reduction case ... was suspended," the companies said in their review of the 2003-04 work plan.*

within the unit area to develop a comprehensive unit plan."

In addition to work on the Thomson sand condensate resource, the state wants the owners to do "reserve estimates and risk assessments for Brookian and Pre-Mississippian" prospects and to incorporate that potential into the unit's reservoir model.

And the state wants the Point Thomson owners to evaluate "other development alternatives (for the Point Thomson sand), such as initial partial blowdown followed by limited or full gas cycling," alternatives for reservoir pressure support and affect of blowdown timing on ultimate recovery.

And, where the owners asserted in the plan that they have the capability and experience to develop and operate the Point Thomson unit "and its associated technical challenges," the state inserted the words "to overcome" in the sentence, so it reads: "The Point Thomson owners possess both the capability and North Slope experience necessary to develop and reliably operate the Point Thomson unit and to overcome its associated technical challenges." ●



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## NORWAY

### Workers strike on four offshore drilling rigs

A week after Norway's government ordered an end to an earlier strike by oil field workers, 175 more walked off their jobs July 2 after results by state-led mediation for higher salaries failed.

The walkout by the workers on four offshore rigs wasn't expected to effect Norway's daily production of 3 million barrels of oil because the crews drill for oil and don't produce it.

The Federation of Norwegian Oil Workers called the July 2 strike after contract talks with the Norwegian Shipowner's Association broke down. It comes just one week after the government ordered an end to an earlier strike by 207 members of the same union on offshore platforms because it threatened to shut down oil and natural gas production in Norway — the world's third largest oil exporter.

A union statement said the conflict was mainly over its demand for job security for members. The employers said the union also demanded that current contracts cover workers on platforms temporarily in Norway for repairs.

The government has the power to order the strikers back to work, but that was unlikely since the walkout did not threaten daily production.

The Shipowner's Association said the offshore rig industry could not afford to meet the union's demands. High wage levels already mean that it costs 250,000

see STRIKE page 16

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continued from page 1

## PIONEER

Pioneer had preliminary discussions with state and federal agencies in early July on a plan to develop a small pad at the company's Gwydyr Bay prospect, north of the Prudhoe Bay unit.

Pioneer's plans have not yet reached the application stage, but the company is looking at a small, three-acre pad, and a corridor running south to T Pad in the Prudhoe Bay unit.

Pioneer acquired four leases at Gwydyr Bay, some 6,440 acres, three on the edge of the Prudhoe Bay unit, in the state's 2003 Beaufort Sea areawide lease sale. It paid \$27.27 an acre for the most northerly of the leases, the one of the four not adjacent to Prudhoe, \$55.14 an acre for each of the two leases on the northern edge of Prudhoe, and \$85.07 an acre for a tract just to the southeast, which is also on the Prudhoe border.

A number of wells have been drilled in the Gwydyr Bay area and on and surrounding the Pioneer leases there are oil discoveries, never developed, some dating from the 1960s.

BP Exploration (Alaska) tried to develop an accumulation it discovered on what are now Pioneer leases in the late 1990s, and Pioneer, which has done no drilling on the just-acquired leases, is presumably looking at finding an economic way to bring these small known accumulations into production.

### Pioneer looking for step change

Sheffield told Alliance members in May that while Alaska's North Slope is one of four key exploration hot spots for Pioneer worldwide it is also "the most expensive basin in the world."

Alaska is "a great place to find oil, but sometimes it's not such a great place to make money," he said.

Because of that, Pioneer is focused on achieving lower-cost operations on the North Slope: Sheffield said one of the company's goals in Alaska is to "achieve a step change in the North Slope cost structure."

Gwydyr Bay is probably going to require such a step change, as companies have drilled there for decades — including BP in the late 1990s — but there has never been production from the area.

### Pete's Wicked

The pad Pioneer is considering is near the surface location of BP's 1997 Pete's Wicked oil discovery, a prospect which BP described as a small Sagavanirktok/Ivishak find. Pete's Wicked was drilled just north

*Alaska is "a great place to find oil, but sometimes it's not such a great place to make money." ... one of the company's goals in Alaska is to "achieve a step change in the North Slope cost structure."*

—Ken Sheffield, Pioneer Natural Resources Alaska

of the Prudhoe unit boundary.

BP tried to find a way to put the Pete's Wicked accumulation on production, and said in a proposal to state agencies in 1998 that the directional exploration well was plugged and abandoned "after the reserves were found too small to justify a conventional development (i.e., involving a gravel road, pad and a pipeline on vertical support members ... extending from T Pad to the Pete's Wicked location)." BP said that the situation was similar for two other small accumulations, also Sagavanirktok/Ivishak discoveries, the Kuparuk River Delta and Point Storkersen wells.

These were earlier wells, in the same general area, although not on the Pioneer leases.

Hamilton Brothers Oil Co. drilled the Point Storkersen well in 1969. That well, in section 7, township 12 north, range 14 east, Umiat Meridian, east of the Pioneer leases, was almost vertical, with a total depth of 11,473 feet and a true vertical depth of 11,470 feet. It flowed 315 barrels per day of oil in a Sadlerochit sand test at 10,577 to 10,640 feet.

Hamilton Brothers drilled the Kup Delta 51-1 well in 1970 in section 11-T12N-R13E, UM, west of the Pioneer leases, to a depth of 11,200 feet. A drill stem test flowed 2,200 bpd at 7,131 to 7,171 feet, described as Upper Cretaceous sand. The well was sidetracked later in 1970, and oil was recovered in drill stem tests at the sidetrack.

### Re-useable pipe considered in late '90s

BP drilled Pete's Wicked from section 15-T12N-R13E, UM, on what is now Pioneer lease ADL 390427, north to a bottomhole in section 10-T12N-R13E, UM, on what is now Pioneer lease ADL 390425. The well had a measured depth of 12,681 feet and a true vertical depth of 10,727 feet.

Another well indicated on maps as having found oil is Conoco's 1980 Gwydyr Bay State No. 1, an 11,102-foot vertical hole drilled in section 9-T12N-R13E, UM, also on lease ADL 390425.

When BP looked at developing Pete's Wicked, it was considering development without a gravel pad, with just three 10-12

foot diameter well cellar/house combinations. The company was also considering using flexible pipe for the project — pipe developed for undersea use. BP said the pipe had been in common use in the Gulf of Mexico for more than 15 years, and said flexible pipelines with high-density polyethylene liners have been used on the North Slope at two Prudhoe Bay drill sites "for well tie-in lines for the past three years and have worked well in the Arctic."

The company proposed a four-inch diameter line for the Pete's Wicked development. That diameter line, BP told regulators, is available in one-mile continuous lengths, and would require only three or four joints. With the continuous high-density polyethylene liner, the company said, the lines would be completely corrosion proof.

And after depletion of the Pete's Wicket accumulation, the line could be spooled up and reused in other applications.

BP proposed placing some of the line directly on the tundra. Part of the line, through a critical caribou crossing area, would be raised on seven-foot vertical support members, and in other areas the line would be raised one foot above the tundra on plastic or wooden blocks to allow drainage and movement by flightless molting waterfowl, shorebirds or broods.

BP considered a second Pete's Wicked exploration well in the late '90s, farther to the east at Gwydyr Bay, but neither the second well nor development of the discovery occurred, and the surface and bottomhole leases at Pete's Wicked were acquired by Pioneer last year. ●



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## ST. MALO

Unocal holds a 28.7 percent interest in St. Malo. Devon holds a 22.5 percent interest, Petrobras a 25 percent interest, ChevronTexaco a 12.5 percent interest, EnCana a 6.25 percent interest, ExxonMobil a 3.75 percent interest and Eni a 1.25 percent interest.

### Appraisal well in 7,000-plus feet of water

The St. Malo appraisal well, in 7,032 feet of water and drilled to a total depth of 28,903 feet, actually re-entered and deepened the Dana Point dry hole drilled in 2001 that stopped roughly 2,000 feet shy of the prize.

Deepening the existing well cost the owners just \$31 million, about \$25 million less than drilling a new one.

Aside from expanding the discovery itself, the St. Malo appraisal well provided further evidence of the enormous potential and extent of the deeper Eocene and Paleocene horizons of the lower Tertiary trend.

"This successful appraisal well reinforces our enthusiasm for the St. Malo discovery and the potential of the entire lower Tertiary trend," said John Richels,

president of St. Malo partner Devon Energy.

Those deeper horizons already have yielded announced discoveries at neighboring Cascade and Chinook, within 30 miles of St. Malo.

### FPSO being considered

St. Malo owners have indicated that any development plan at St. Malo could include discoveries at Cascade and another nearby discovery, Sturgis. A Devon representative said at May's Offshore Technology Conference in Houston, Texas, that one option being considered for the area is a so-called FPSO, or floating production, storage and offloading facility.

FPSOs, useful where pipelines and other infrastructure are sparse or non-existent, are typically used for isolated fields around the globe but have yet to make their debut in the Gulf. Oil is generally transported ashore via marine tankers.

Upon completion of the St. Malo appraisal well, the Discoverer Spirit drillship is scheduled to test the Sardinia prospect on Keathley Canyon block 681, also a lower Tertiary target. And Devon is currently drilling another high-potential lower Tertiary exploration target called Jack, on Walker Ridge block 759. ●

continued from page 14

## STRIKE

kroner (US\$35,700) more per day in personnel costs to operate a rig in Norwegian waters than in the British sector of the North Sea, it said.

A statement said the workers earn an average of 485,000 kroner (US\$69,000) a year, working two-week shifts, followed by

four weeks off.

The four rigs — Polar Pioneer, Transocean Leader, Transocean Searcher and Transocean Arctic — are all owned by Houston-based Transocean Inc. The company said it could take up to 10 days to stop operations on the rigs if that is needed, because of the safety measures imposed in shutting down drilling operations.

—THE ASSOCIATED PRESS

continued from page 1

## PARTNERSHIP

Neufeld said in a statement that upgrading and strengthening the road will "allow for year-round access and generate an increase in oil and gas exploration and development activities" in British Columbia's gas stronghold.

He said the undertaking is a "good example of an innovative public-private partnership that will create employment and economic opportunities for B.C."

—GARY PARK, Petroleum News  
Calgary correspondent

continued from page 1

## RAILWAY

Rail's freight operations.

Although not part of the deal involving BC Rail's 1,500-mile network, the transaction puts a more positive spin on the Alaska-British Columbia talks.

A spokesman for BC Rail said in late May that the company had never found any evidence of sufficient freight volumes to support building a link to Alaska, but a spokesman for Canadian National said his company has weighed the project.

"If there is a strong business case we would be prepared to support it," he told the Financial Post.

Tony Valeri, Canada's federal transport minister before the June 28 election, said in a letter in May that he endorsed Canada proceeding with a design-development exercise for the Alaska-British Columbia project.

### Cost has stood in way of project

Over many years, the case has been made for a rail tie from Alaska to the rest of North America to encourage resource

development in Alaska, the Yukon and northern British Columbia.

Standing in the way has been the hefty cost, now roughly estimated at US\$2 billion.

The outlook has taken a quantum leap forward in recent times, now that the U.S. Department of Defense has unveiled plans to locate much of the infrastructure for the Strategic Defense Initiative in Alaska and favors shipping the equipment and material by rail rather than by ship or truck.

This lends hope to those in Alaska and Canada's northern regions who believe a northern railway would boost development of stranded oil and gas resources, by reducing the cost of moving equipment to and from isolated areas.

A rail right of way could also be combined with a route for shipping North Slope gas to Lower 48 markets, greatly shrinking the pipeline cost.

Railway proponents are also encouraged by the more positive response from Prime Minister Paul Martin, who has reportedly shown more interest in the scheme than his predecessor Jean Chrétien. ●

development in Alaska, the Yukon and northern British Columbia.

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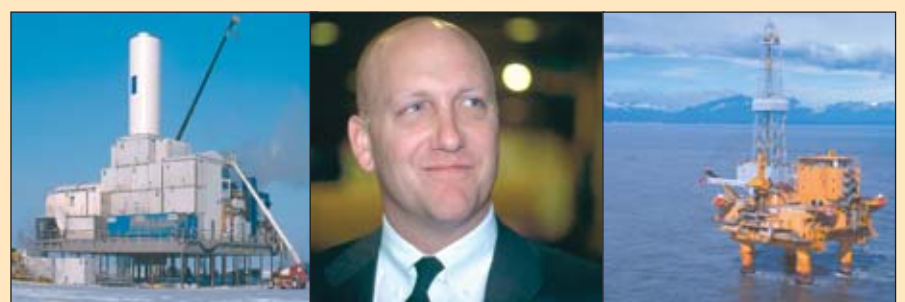
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# NORTH OF 60 MINING NEWS

## **3 Drills churning at Cleary**

*Golden Summit delivers high grade drill results*

## **10 Pebble area booming**

*Northern Dynasty ups spending on huge porphyry project*

## **15 Pogo property optioned**

*Rimfire, AngloGold expand their joint ventures*

A USIBELLI COAL DRAGLINE WORKS ITS WAY TO ANOTHER MINE SITE LOCATION.

PHOTO BY CHRIS AREND/COURTESY USIBELL COAL MINE

*A special supplement to Petroleum News*

WEEK OF  
July 11, 2004

**Petroleum**  
news

• NORTHWEST ALASKA

# Red Dog's toxic release ranking misleading

World's largest zinc mine says EPA report misleading because naturally occurring metals contained in rock tailings counted as toxic releases

By PATRICIA LILES

Mining News Editor

Alaska's largest mine and the world's largest producer of zinc counters its national top ranking by the Environmental Protection Agency for toxic releases, saying that the agency's decision to count naturally occurring metals contained in unmilled rock is misleading.

According to the latest Toxic Release Inventory report issued by EPA, Red Dog received the dubious honor of topping the nationwide list, due to the amount of metals considered toxic which naturally occur in rock at the remote mine site.

For the 2002 report to EPA, Red Dog's count of "toxic" materials was 481 million pounds of zinc, lead and other trace minerals, according to the mine's environmental superintendent Jim Kulas. In an interview with Mining News on June 28, he said that 99.94 percent of that total toxic release calculation covers metals contained in the mine's tailings and waste rock.

"A change in the reporting method made Red Dog number one on the list," he said. "We're not reporting any more relative to the company's production."

Located in the remote northwestern region of Alaska, the mine operated by Teck Cominco Ltd. produced 579,300 tonnes of zinc and 124,300 tonnes of lead concentrate in 2003. Red Dog's work force of about 400 moved more than 8 million tons of rock to mill more than 3 million tonnes of ore in order to extract those valuable metals, worth more than \$400 million.



Located in the remote northwestern region of Alaska, the mine operated by Teck Cominco Ltd. produced 579,300 tonnes of zinc and 124,300 tonnes of lead concentrate in 2003

Remaining mineralization which is of a low grade and not economically recoverable is classified as waste rock, which must be moved to access the higher grades of ore. In addition, some trace amounts of metals remain in Red Dog tailings, which are stored

at the mine site under strict monitoring from environmental agencies.

Even though that mineralization remains locked up in its host rock, the metals must be counted in Red Dog's annual report to EPA for its Toxic Release Inventory. Red Dog's volume of lead and zinc mineralization puts the mine at the top of the nation's Toxic Release Inventory.

"Federal regulations do not distinguish between natural materials locked away in rock which is safely stored on the plant site from hazardous releases of man-made chemicals from an industrial plant which is released into the environment," Rob Scott, general manager at Red Dog, said in a June 23 press release. "As a result, the TRI numbers paint an inaccurate and misleading picture of what actually happens at one of the most regulated mines in the world."

## Actual releases lower

In a four-page document on its website detailing the company's TRI reporting, Teck Cominco detailed the amount of materials "actually released" to the environment, whether it be to water, the air or to the ground.

Metals that were released in water totaled 800 pounds per year, Kulas said, an amount that is controlled, monitored and "heavily regulated." It's roughly 60 to 70 parts per billion of zinc, far cleaner than drinking water standards of 5,000 parts per billion.

Area streams feeding into the Red Dog

deposit contain naturally occurring, significantly elevated levels of zinc and lead, thanks to Mother Nature, Kulas added. In fact, that visible mineralization, noticed by pilots flying over the remote area, first led geologists to prospect the area in the 1950s.

Actual air releases reported in 2002 included 42,400 pounds, and 153,600 pounds were released to the ground, the company said on its website. The total of "actual releases" of toxic materials was 196,716 pounds.

Of that total, the largest category was methanol, of which 153,556 pounds were released. Methanol is used in winter drilling, the company said.

Zinc made up the next highest category of releases, with 32,531 pounds "actually released," and with 284 million pounds reported. Teck Cominco said the mine "actually released" 8,289 pounds of lead, but had to report 188 million pounds to EPA.

Other releases also reported to EPA included 1,176 pounds of polyaromatics and 7.5 grams of dioxin, as well as 1,164 pounds of trace elements that included cadmium, chromium, copper, cobalt, manganese and nickel.

## Reporting method changed

Red Dog's sheer volume of lead and zinc mineralization helps to put the mine at the top of the nation's Toxic Release Inventory. Nationwide, 4.79 billion pounds of toxic

see RED DOG page 8



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● FAIRBANKS, ALASKA

# Drills churning at Cleary

Freegold, Meridian announce high-grade drill results from Golden Summit, more drilling planned on Tolovana property

By **PATRICIA LILES**  
Mining News Editor

**G**olden Summit gave up some of its glory in high-grade gold samples taken during a 4,900-foot drill program completed this spring at the gold property about 25 miles north of Fairbanks, Alaska.

Partners in the hard-rock property, Freegold Ventures and Meridian Gold, released assay results July 7 from six core holes. The best results included a 10.5-foot interval that assayed

0.449 ounces of gold per ton, and a two-foot interval that measured 0.968 ounces.

Gold mineralization was "in the form of fine grained and visible free gold associated with quartz veins, stockworks and quartz-rich shear zones containing between 1 to 3 percent pyrite, arsenopyrite and jamesonite," Freegold said in its press release. "Coarse gold was observed in Phase 1 drill core suggesting that a nugget effect may be present."

Drill holes successfully intersected a vein 410 feet below previously mined workings of the Cleary Hill Mine. Drilling also indicated additional mineralized zones above and below the vein, the company said.

Six holes were drilled to confirm the structural and grade continuity of a portion of the Cleary Hill vein system. "The results confirm that the old mine longitudinal sections from the 1940s accurately portray the trend of high-grade mineral-

ization associated with the Bankers Stope chute on the Cleary Hill vein," the company said. "These sections indicate several other mineralized vein systems."

## Phase II exploration initiated

Freegold and Meridian have initiated Phase II exploration at Golden Summit on the recently acquired Tolovana prospect immediately adjacent to and approximately 750 meters (2,400 feet) west of the Cleary Hill mine area.

*The best results included a 10.5-foot interval that assayed 0.449 ounces of gold per ton, and a two-foot interval that measured 0.968 ounces.*

The companies submitted regulatory permits to "...allow the trenching and drilling of known and suspected high grade veins previously mined at the old Tolovana underground mine," Freegold said.

In mid-June, Freegold announced an agreement to acquire the rights to a 20-year lease on the Tolovana gold property. The company also submitted an exploration application to state officials requesting permission to re-excavate trenches cut in 1981 and 1982 in order to collect rock chip channel samples.

Trenching will utilize a John Deere 450 bulldozer with a backhoe excavator to expose bedrock, with efforts to confine surface disturbance to existing trenches, Freegold's consultant Avalon Development said in the permit application.

The company requested permission to re-cut eight trenches, each up to 250 feet in length, 3.5 feet wide and up to four feet deep, on the property. ●

## DELTA JUNCTION, ALASKA

### Pogo helicopter pilot rescues neighboring geologists from ridge-top camp

Two Fairbanks-based exploration geologists trapped in a remote camp threatened by a huge wild-lands fire burning out of control in Alaska's Interior were rescued by a helicopter pilot dispatched from the Pogo construction camp.

Shortly after their air extraction, the fire burned through the ridge-top camp, destroying eight camp structures and some equipment, Sam Dashevsky, head of Northern Associates Inc., told Mining News on July 8.

His Fairbanks-based geological consulting firm was working out of the camp, first set up and used a year ago, completing prospecting and core drilling for client AngloGold (U.S.A.) Exploration.

"We had a pretty tense day trying to evacuate them from when we received the first call at 3:15 a.m., when the fire was already at the ridge," Dashevsky said. "It was some fairly heroic flights by a local pilot."

State forestry aircraft was grounded and the helicopter on call for Northern Associates' field work couldn't reach the men. A helicopter pilot working at the Pogo camp rescued the men, according to Karl Hanneman, Pogo's manager of public and environmental affairs and special projects.

The two men were trapped by the Camp Creek fire, which had been rapidly advancing since its start on June 23 towards the Pogo mine construction camp in the upper Goodpaster River valley. After reaching the river and Pogo's airstrip, the fire reversed direction and traveled in five hours the six miles from Pogo to the Northern Associates camp above treeline, Dashevsky said.

### Pogo shuts down again

Construction at the Pogo gold project shut down again, the second time this season. Rather than a delay from an environmental permit appeal, the environment itself — a wild-lands fire raging out of control — caused evacuation of 165 construction workers from the remote gold mine project in Interior Alaska's Goodpaster River valley.

The Camp Creek fire burned across the rolling hills, all the way down to the river's edge opposite of the construction camp, according to Pogo's Hanneman.

"We wetted the perimeter and in spots where flames and embers jumped the river, we quickly put them out," he said in a telephone interview from the construction site on July 7. "We knew it was getting close, but it was also very smoky."

Pogo crews saw evidence of the Camp Creek fire shortly after it started on June 23, Hanneman said. "It moved from six miles away to being right in the vicinity, moving in the direction of the river."

Most of Pogo's workers were evacuated June 26, after the job site was demobilized.

see **FIRE** page 14



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

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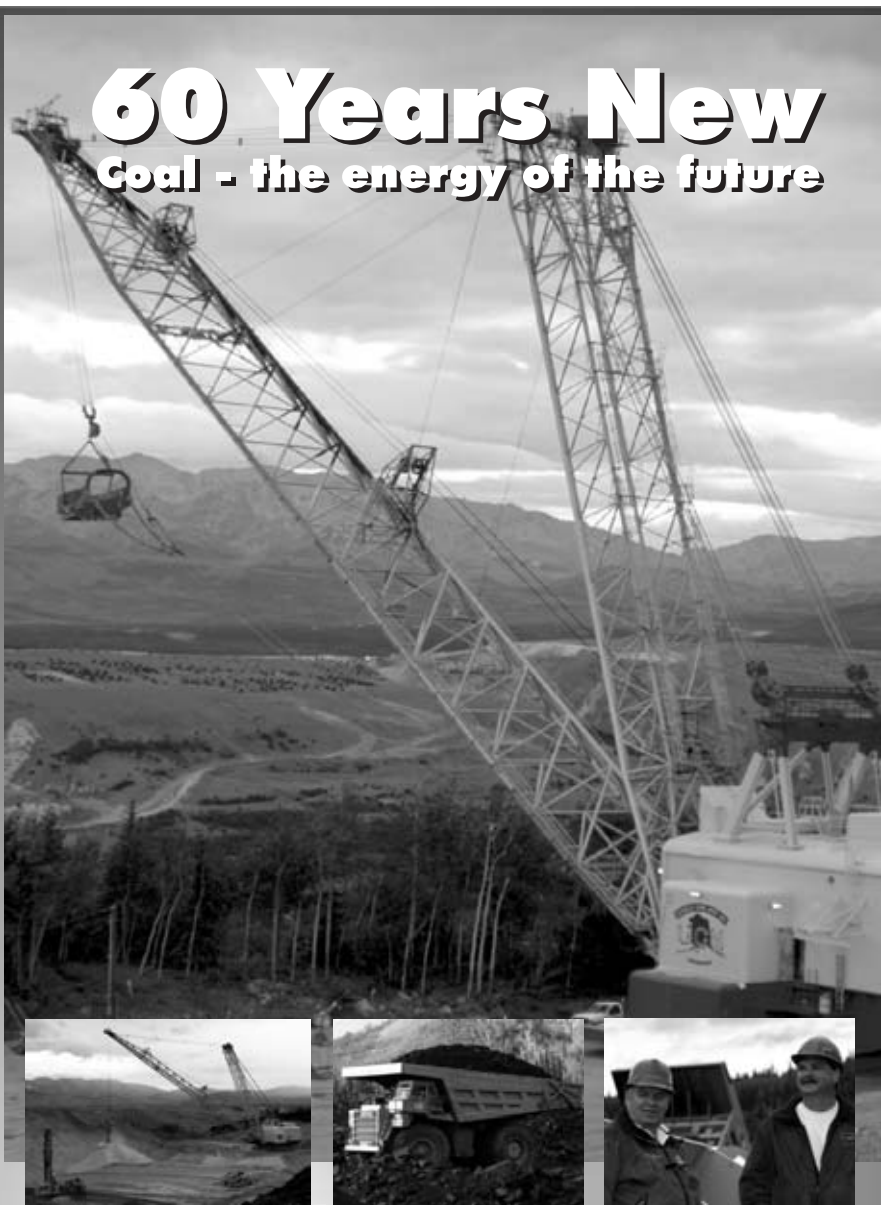
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## BRITISH COLUMBIA

### British Columbia mining on the march

The evidence continues to indicate that British Columbia's mining industry is on the road to recovery.

Exploration spending edged up last year to C\$55 million, from C\$40 million in 2002 and a rock-bottom C\$25 million in 1999, although the B.C. Mining Association has set a C\$100 million target for the province to replace mines that will shut down over the next few years.

But the feared demise of the industry just four years ago has been postponed.

At that time, the province was in dire straits after losing an estimated C\$750 million in exploration spending during the 1990s because of the policies of the New Democratic Party government of that time, according to mining association chief executive officer Gary Livingstone.

He told the Financial Post that the spending shortfall could have yielded eight new mine discoveries, generating more than C\$2 billion in additional capital spending and more than 7,000 new jobs.

Livingstone said British Columbia was viewed as unstable at the time, prompting many mining companies to move elsewhere.

The turnaround started with the election of Gordon Campbell's Liberal government in 2001 and promises of drastic cuts to bureaucratic red-tape.

Instead of different regions scattered through the province, the Campbell government has promised, but not yet fully implemented, a "two-zone system" that clearly established where mining can and can't be done.

The government's pledge is that the change will be in place by the end of 2004.

The C\$100 million exploration goal might even be exceeded this year, the British Columbia Ministry of Energy and Mines has predicted, setting its sights on C\$110 million, boosted by the C\$800 million British Columbia-based companies raised in 2003.

—GARY PARK, Mining News Calgary correspondent

## CANADA

### Iamgold investors scuttle C\$2.3 billion merger with Wheaton River Minerals

A proposal to create Canada's fourth largest gold miner has unraveled, with shareholders of Iamgold rejecting a controversial C\$2.3 billion merger with Wheaton River Minerals.

Iamgold shareholders voted 58 percent against the plan July 6, reviving what had already been a tangled ownership battle involving two U.S.-based companies.

Denver-based Golden Star had previously launched a C\$1.1 billion hostile bid for Iamgold and Idaho-based Coeur d'Alene Mining, the largest U.S. silver producer, had offered C\$3 billion in cash and stock for Wheaton.

Both offers have been rejected, but Golden Star Chief Executive Officer Peter Bradford and Coeur d'Alene Chief Executive Officer Dennis Wheeler both said they are looking to open friendly talks.

Golden Star has set a deadline of July 16 to complete a deal.

Iamgold President and Chief Executive Officer Joseph Conway, expressing disappointment at the shareholder vote, said "we will now be looking at all our opportunities."

The planned merger would have created Axiom Gold, with forecast production of 980,000 ounces of gold this year, trailing only Barrick Gold, Placer Dome and Kinross Gold in Canada.

—GARY PARK, Petroleum News Calgary correspondent

*Iamgold shareholders voted 58 percent against the plan July 6, reviving what had already been a tangled ownership battle involving two U.S.-based companies.*

## FAIRBANKS, ALASKA



COURTESY OF FAIRBANKS GOLD MINING INC.

Federal fire managers monitoring the Boundary fire required evacuation of the area off the Steese Highway on the afternoon of June 30, giving Fort Knox, Alaska's largest gold mine only a few hours to shut down operations before departing the property at 6 p.m.

## Fort Knox evacuated

*Fire crews close Steese Highway, evacuation order forces mine and mill staff to shut down; work now back to normal production*

By PATRICIA LILES

Mining News Editor

In the final hot and dry days of June, the Boundary wild lands fire was burning its way across rolling hills in Alaska's Interior three to five miles from the Fort Knox gold mine, although workers couldn't see its proximity due to smoke shrouding the area.

Weather conditions changed on July 4, with shifting winds and cooling temperatures causing the fire to shift directions. That gave Fort Knox's general manager John Wild a view of how close the fire came to the mine and mill site, about 25 miles northeast of Fairbanks.

"It cleared up on Sunday (July 4) and we could see evidence of the fire to the north," he said in a telephone interview July 6. "You can see it when you first exit the mill."

Federal fire managers monitoring the Boundary fire required evacuation of the area off the Steese Highway on the afternoon of June 30, giving Alaska's largest

gold mine only a few hours to shut down operations before departing the property at 6 p.m.

"It was very smoky out here, but we did not expect to be evacuated, to shut down," Wild said. "We were not prepared."

Nevertheless, the day crew of roughly 200 workers at Fort Knox quickly prepared the mine and mill for an emergency shut down and evacuated the area within a few hours. "I was very pleased with the work," Wild said. "The shutdown was very orderly, very organized and it happened very quickly."

### Earthmoving equipment parked in pit

Although a successful operation, the shutdown was no easy feat. All of the "rolling stock" of large earthmoving equipment was moved and parked at the bottom of the pit, potentially protecting the equipment from fire and keeping it consolidated in case fire crews needed to

see FORT KNOX page 10

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Images taken before and after the Good Friday earthquake in Anchorage, Alaska in 1964. It measured 9.2 on the Richter Scale.

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● NEWS ANALYSIS

# Freeman report: Alaska mining at pace not seen in more than five years

*People, rigs and aircraft in short supply in state, with exploration and development projects under way from Nome to Ketchikan, and from the Brooks Range to Iliamna*

By **CURT FREEMAN**

For North of 60 Mining News

As anyone can tell you who has tried recently to locate geologists, drill rigs and helicopters, Alaska is not the place to search for any of these commodities. Mineral exploration and development in Alaska is clipping along at a pace not seen in more than five years and in the process, these activities have sucked up just about all of the people, rigs and aircraft in the state. Exploration and development projects are spread from Nome to Ketchikan, the Brooks Range to Iliamna. The metals being sought cover the period table and with good reason — metals prices remain strong and stable and demand curve forecasts look promising. The only downer so far this season has been a plague of wildfires raging across Interior Alaska which have threatened the Pogo mine site, temporarily closed the Fort Knox operation and prevented fixed wing and helicopter support from reaching field programs over an area the size of Texas. With the monsoon season approaching the fires will go out and the drill masts will start sprouting again as Interior tries to catch up with the rest of the state.

## Western Alaska

**ST. ANDREW GOLDFIELDS LTD.** said that in anticipation of the mine re-start, it has begun the process to obtain an Environmental Protection Agency water discharge permit for its Nixon Fork gold-copper property near McGrath. The company expects to complete baseline work for the permits this fall and hopes to have the permit in hand by the spring of 2005.

The company also indicated that it plans to re-treat some of the former operating mine's tailings because newly installed mill recovery equipment should be able to recover significant gold and copper from existing tailings. Auger drilling in the existing tailings pond has indicated grades ranging from 0.16 ounces of gold per tonne to 0.9 ounces per tonne. Preliminary metallurgical test work has indicated up to 36 percent of this gold resource could be recovered by the improved gravity circuit. Up to 80-90 percent of the remaining gold may be recovered by the proposed metallurgical process that will be used to treat future underground ore.

The company also announced results from 8,000 meters of exploration drilling on the C3000 and C3300 zones where new drilling succeeded in extending mineralization an additional 60 meters below previously mined levels. Results from the C3000 area included hole N04U011 which returned 3 meters grading 46.9 grams of gold per tonne, hole N04U014 which returned 1.5 meters grading 14.3 grams of gold per tonne, and 2.2 meters grading 51.5 grams of gold per tonne. Drilling results in the C3300 area included hole N04U027 which returned 8.5 meters grading 27.1 grams of gold per tonne and 6.7 meters grading 34.7 grams of gold per tonne, hole N04U028 which returned 4 meters grading 46.2 grams of gold per tonne; hole N04U030 which returned 11 meters grading 79.3 grams of gold per

## The author

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PATRICIA LILES

CURT FREEMAN

tonne, hole N04U036 which returned 5.5 meters grading 299.5 grams of gold per tonne, hole N04U043 which returned 4.4 meters grading 71.6 grams of gold per tonne, hole N04U049 which returned 10.1 meters grading 74.5 grams of gold per tonne and hole N04U056 which returned 10.4 meters grading 69.4 grams of gold per tonne.

The underground exploration program is expected to continue through year-end and is targeted to add an additional 120,000 tonnes of material to current indicated resources of 69,000 tonnes grading 32.4 grams of gold per tonne or 71,900 ounces of gold. An additional 76,000 tonnes grading 26.4 grams of gold per tonne or 64,400 ounces is classified as an inferred resource.

**NORTHERN DYNASTY MINERALS** said it had raised additional capital to be used to advance its Pebble copper-gold project near Iliamna. The C\$33.5 million program planned for 2004 has three main components: diamond drilling to convert the currently outlined inferred mineral resource to measured and indicated categories; to advance project engineering for completion of a bankable feasibility study in 2005; and to conduct environmental and socioeconomic studies meeting the requirements for a federal Environmental Impact Statement as well as other state and federal permits.

Four diamond drill rigs currently are working on the project and additional drilling capacity is being sought. By mid-June the company had completed 22,000 feet of the planned 130,000-foot program for 2004. In addition to resource development, some of this drilling is directed toward testing sites for tailings impoundment and surface facilities and to obtain rock quality characteristics for pit planning.

**LIBERTY STAR GOLD** said four priority targets have been identified by airborne magnetics surveys conducted earlier this year on its Big Chunk copper-gold property near Iliamna. The four magnetic anomalies will be the subject of immediate ground follow-up. In addition, a detailed satellite imagery analysis has used the signature of the adjacent Pebble deposit alteration to identify three additional exploration targets on the Big Chunk property. An extensive ground geochemical program over these intended targets and sur-



COURTESY OF EVERGREEN HELICOPTERS OF ALASKA

Mineral exploration and development in Alaska is clipping along at a pace not seen in more than five years. In the process, finding available aircraft has been tough. Pictured is an Evergreen Helicopters Bell 212 lifting a bucket of concrete during work at a mining site.

rounding areas is under way.

## Eastern Interior

**KINROSS GOLD** said first quarter 2004 results from its Fort Knox-True North operations include 75,980 ounces of gold produced at a total cash cost of \$290

per ounce compared to 91,214 ounces of gold at a total cash cost of \$260 per ounce during the first quarter of 2003. Mill throughput for the quarter averaged 35,750 tonnes per day at an average grade of 0.81

see **FREEMAN** page 6

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## FREEMAN

grams of gold per tonne. Recovery was down slightly at 81 percent and total operating costs were \$376 per ounce.

Although production was down over last year's first quarter production rates, the planned suspension of mining at the True North pit and expected lower than average grades meant that first quarter gold production was slightly ahead of planned rates and total costs were 6 percent below planned levels. The mine continued its planned pit expansion that should bring an additional 1 million ounces of gold into the mineable category over the next several years. Due to curtailed production from True North total 2004 gold production from Fort Knox is estimated at 340,000 ounces at a cash cost of \$220 per ounce.

Mother Nature has accomplished what low gold prices could not: shut down Kinross Gold's Fort Knox gold mine! Two particularly virulent wildfires have been raging through the Fairbanks district and in late June Alaska Division of Forestry officials closed roads and issued an evacuation order for a large area north of Fairbanks that included the Fort Knox mine. The mine took steps to slowly shut down the 40,000 tonne per day operation and leave a care and maintenance crew on-site. All equipment that could be moved was clustered in the open pit where the likelihood of fire damage was considered minimal. The shut down lasted only a few days but proved once again who is REALLY in control.

**FREEGOLD VENTURES LTD.** said it has concluded an agreement with **NAUTILUS ALASKA INC.** to acquire Nautilus' rights to a 20-year lease on the Tolovana gold property adjacent to Freegold's Golden Summit project in the Fairbanks district. Previous drilling on the Tolovana property intersected disseminated and high grade gold values in intrusive and associated metamorphic rocks including hole 96-26 which returned 10 feet grading 1.488 ounces of gold per ton and hole 98-01 which returned 800 feet grading 0.021 ounces of gold per ton and 110 feet grading 0.064 ounces of gold per ton. Mineralization remains open to the east, west and to depth. Exploration in the Tolovana area is expected to commence in July.

Under the terms of the agreement Freegold will assume all of Nautilus' obligations under the lease, which include making annual payments ranging from \$1,000 to \$1,500 per month for the duration of the lease. The property is subject to a sliding scale net smelter return royalty ranging from 1.5 percent if gold is below \$300 per ounce to 3 percent if gold is above \$400 per ounce. In addition, Freegold has made a cash payment of \$7,500 on signing and will issue 400,000 shares on regulatory approval and, during the first five years of the agreement, an additional 200,000 shares within 30 days of a minimum 200,000 ounce mineral

resource being calculated on property.

**TERYL RESOURCES CORP.** said it has acquired the Fox Creek prospect adjacent to its West Ridge property in the Fairbanks district. Previous work at Fox Creek included one reverse circulation hole drilled by Cyprus-Amex in 1995 to a depth of 255 feet along the schist-granite contact. A 30-foot zone from 65 to 95 feet averaged 0.03 ounces of gold per ton and

*St. Andrew Goldfields Ltd. ... also indicated that it plans to re-treat some of the former operating mine's tailings because newly installed mill recovery equipment should be able to recover significant gold and copper from existing tailings (at Nixon Fork).*

was associated with elevated molybdenum and arsenic.

Terms of the acquisition agreement include \$10,000 on signing and on each anniversary date. The owner retains a 3 percent net smelter return royalty which Teryl has an option to purchase for \$1,000,000 prior to the date of production or \$1,500,000 after the production date. Exploration plans for the property were not disclosed.

The biggest news of the month came in early May when **TECK COMINCO LTD.**, **SUMITOMO METAL MINING CO. LTD.** and **SUMITOMO CORP.**, the participants in the Pogo Joint Venture, said the EPA permit appeal filed by Northern Alaska Environmental Center had been withdrawn and construction of the mine could proceed. Alaska Gov. Frank Murkowski, EPA representatives, Alaska Department of Natural Resources representatives and representatives of the mine owners and the center held marathon meetings with a mediator before coming to terms on and agreement calling for increased oversight at some parts of the mine in exchange for the center's withdrawal of their appeal.

Prior to settlement of the appeal about 160 workers had been laid off from the construction sites along the proposed 49-mile access road and at the mine site itself. Shortly after the settlement was announced, workers were rehired and construction work started anew, however the cost of the shutdown will not be known for some time and the damage the appeal did to the Alaskan mining industry will be felt for years into the future.

The companies indicated that all major project permits have been received and full scale project construction was resumed in early June but curtailed in late June due to large wildfires burning due west of the mine which threatened personnel and equipment working on the project. This fire and several others have disrupted mineral exploration throughout Interior Alaska due to heavy smoke, high winds and extremely dry conditions.

**RIMFIRE MINERALS** increased its landholdings around the Beverly, Boundary and SE Surf properties in the

Goodpaster district southeast of the Pogo deposit. Rimfire also said it had signed an option agreement with **ANGLOGOLD USA EXPLORATION** on the Beverly property. Previous exploration at Beverly was limited to reconnaissance-scale prospecting, mapping, airborne geophysics and soil sampling. Results include a 1,000 meter by 1,000 meter gold and pathfinder soil anomaly, strongly anomalous silt samples (to 1,020 parts per billion gold) and float boulders assaying up to 2.4 grams of gold per tonne.

Under terms of the agreement, AngloGold may earn a 50 percent interest in the joint venture by spending \$1 million and paying Rimfire \$200,000 in staged cash payments over four years. AngloGold may increase its interest to 70 percent by incurring an additional \$600,000 in exploration expenditures. AngloGold also agreed to make cash payments totaling \$75,000 at certain exploration milestones as required by an underlying purchase agreement. Rimfire may also elect to have AngloGold, for an additional 5 percent participating interest, carry the costs required to bring the property to commercial production. Immediate exploration plans were not released.

### Alaska Range

**NEVADA STAR RESOURCES** announced plans for 2004 exploration on its MAN project in the central Alaska Range. The company plans on focusing its exploration work on the northern sections of the MAN property, in particular, the Canwell, Rainy, Eureka, and Broxson areas. Work to be performed will include geophysics (3D magnetic-inversion, universal time-domain electromagnetics and max-min electromagnetics), and rock and soil sampling. Groundwork is scheduled to start in June followed by a 2,000 meter reverse circulation drilling program in August. The southern section of the MAN project is under joint venture with Anglo American Exploration (Canada) Ltd., who will perform exploration independent of Nevada Star's efforts on the remainder of the project.

**FULL METAL MINERALS LTD.** said drilling has begun at its Gunsite copper-gold project in the Talkeetna Mountains. Four to six diamond drill holes totaling 750 meters are planned as an initial phase. Underlain by a Cretaceous dioritic batholith, the property hosts intrusive hosted copper-gold mineralization in subhorizontal fractures and veins over an area of at least four square miles. Mineralization consists of both structurally controlled and disseminated porphyry-type copper-gold mineralization. Four areas of high-grade copper-gold mineralization are present on the property. Two of these zones, Prescott Point and Prescott West, will be drill tested. The Prescott Point showing contains up to 10 percent disseminated bornite and chalcopyrite in diorite. Twelve samples taken by previous operators across a width of 7.4 meters averaged 1.5 percent copper and 3.4 grams of gold per tonne. A grab sample taken from outcrop at the heart of

the Prescott showing where the sulfides are dominantly bornite assayed 4.38 percent copper and 6.0 grams of gold per tonne while a 7.4 meter chip sample assayed 2.3 percent copper and 3.4 grams of gold per tonne.

The Prescott West showing area occurs approximately 300 meters west of the Prescott Point showing and extends to the west for an additional 1,400 feet. A 60 meter high cliff face exposes the highest density of mineralized fractures and quartz veins found on the property and is commonly stained green from malachite mineralization. A grab sample taken from an eight-inch quartz vein in this area assayed 2.81 percent copper and 3.0 grams of gold per tonne.

**CANALASKA VENTURES LTD.** said final approval has been received from the **TSX VENTURE EXCHANGE** on the proposed acquisition by **FREEGOLD VENTURES LTD.** of Canalaska's Rainbow Hill project in the Valdez Creek district. Under the terms of the agreement, Freegold may earn up to a 50 percent interest in the Rainbow Hill project by incurring exploration expenditures of \$2 million over six years, making cash payments of \$160,000 over four years, and issuing 300,000 shares over four years. Freegold may increase its interest to 60 percent by completing a positive feasibility study, and to 65 percent by placing the project into commercial production. The Rainbow Hill project is upstream from placer gold producing streams which have produced more than 500,000 ounces of gold since the early 1900s. The Rainbow Hill project is centered on Gold Hill and Lucky Hill where most of the known lode gold occurrences of the district are found. Immediate plans for the project were not released.

Alaska newcomer **MAX RESOURCE CORP.** said drilling has commenced at its Gold Hill project south of the Denali Highway in the eastern Valdez Creek district. The initial phase of the diamond drilling will test high-grade mineralization encountered in prior drilling by Amex and General Crude Oil. The program will consist of from four to seven diamond drill holes planned to intersect values that included 1.5 meters of 15.0 grams gold per tonne, 1.5 meters of 8 grams gold per tonne, 1.5 meters of 22.9 grams gold per tonne, 1.2 meters of 15.6 grams gold per tonne and 1.10 meters of 54.3 grams gold per tonne.

Values of 8.6 parts per million of gold were found by the U.S. Bureau of Mines in a regional rock sampling program. This area will be sampled and mapped to find the extent of these high-grade surface samples. The mineralization on the Gold Hill prospect is related to intrusive events which occurred on Gold Hill and nearby West Hill. The mineralization occurs as disseminations and on fractures and appears to be structurally controlled. The alteration and mineralization occur over an area of at least two square miles. MAX recently staked a 1,659 hectare area west of the Gold Hill property that encompasses areas of outcrops containing high gold grades that will be explored during the drill program. Welcome to Alaska MAX Resources!

### Northern Alaska

**LITTLE SQUAW MINING CO.** said results of a geological evaluation of the Little Squaw gold property indicate the Mikado, Eneveloe, Summit and Little Squaw veins are parallel, low-sulfide orogenic quartz vein deposits that have potential to host significant high-grade gold resources. In addition, more than 20 other poorly explored gold prospects exist on the

see **FREEMAN** page 7



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**FREEMAN**

project. The veins are up to four miles long and up to 400 feet wide. The report also recommended that potential for up to 300,000 ounces of placer gold exists in lower Big Creek and Little Squaw Creek. Plans for future work were not announced.

**SILVERADO GOLD MINES LTD.** announced results of drilling activities at the Mary's Bench East deposit at its Nolan gold project in the Brooks Range. The drilling consisted of 79 reverse circulation drill holes, 22 of which outline an S-shaped placer gold deposit approximately 300 feet long by 50 feet wide. The holes yielded results ranging up to 1.022 ounces of gold per bedrock square foot. Individual holes returned grade of up to 1.022 oz/bsf (Hole 15). The average grade indicated by drilling was 0.06 oz/bsf, which compares favorably with past mining recoveries on the benches at 0.04-0.05 oz/bsf.

The gold-bearing gravels are 30 to 50 feet below surface and are accessible to extraction by surface mining. Additional placer and lode exploration work is planned for the summer. The company also said lode exploration had begun above Archibald Creek and the Buried Channel where past placer mining has been conducted. Surface geophysics and overburden drilling will be conducted to help target later reverse circulation and/or core drilling in the area.

**Southeast Alaska**

**KENNECOTT** (70.3 percent) and **HECLA** (29.7 percent) announced first quarter 2004 production from the Greens Creek mine on Admiralty Island. The total cash cost per ounce of silver at Greens Creek for the quarter was 98 cents, a

*Mother Nature has accomplished what low gold prices could not: shut down Kinross Gold's Fort Knox gold mine! Two particularly virulent wildfires have been raging through the Fairbanks district and in late June Alaska Division of Forestry officials closed roads and issued an evacuation order for a large area north of Fairbanks that included the Fort Knox mine.*

whopping 41 percent decrease over first quarter 2003 costs of \$1.67 per ounce. The average grade of ore mined during the quarter was 16.69 ounces of silver per ton. During the first quarter the mine produced 2,505,775 ounces of silver, 22,680 ounces of gold, 5,802 tons of lead and 18,287 tons of zinc.

Total production costs for the quarter were \$3.39 per ounce of silver produced versus \$4.39 per ounce for the first quarter of 2003. The company continued its planned \$1.9 million, 40,000 foot surface exploration drilling program, most of it in prospective areas west of the mine. An additional 40,000 feet of drilling, budgeted at \$2 million, will be drilled from existing underground workings.

**COEUR D'ALENE MINES** said the Alaska Industrial Development and Export Authority received legislative approval to issue bonds of up to \$20 million to finance the acquisition, development, improvement and construction of port and related facilities at Slate Creek Cove and Cascade Point in Berners Bay in southeast Alaska. These proposed facilities would facilitate the access to planned mine operations at Coeur's Kensington mine.

The company also said its draft environmental impact statement and other state and federal permits were released for public comment in late June.

The company said results from a revised feasibility study using a new geologic model have updated the property's

mineralized material inventory, indicating the opportunity for a 50 percent increase in mine life beyond the initial 10-year estimate. This effort identified higher-grade mineralized material surrounding the main Kensington vein system and includes an estimated 2.4 million tons measuring 0.302 ounces of gold per ton.

**FREGOLD VENTURES** and **PACIFIC NORTH WEST CAPITAL** said **LONMIN PLC** has elected to proceed with the 2004 exploration program at the Union Bay platinum project north of Ketchikan. The 2004 exploration budget is set at \$1.2 million and will be 100 percent funded by Lonmin. Exploration began in early June with a detailed geological mapping and sampling program and an airborne magnetic and electromagnetic survey. A 9,000 foot core drilling program will begin in mid June.

The initial drill program will target the Continental and Chevelle zones where rock sampling in 2003 returned values ranging from 1 to 14 grams platinum per tonne. The mineralization is hosted by rock types similar to those previously reported at the North and Jaguar Zones, which lie five kilometers to the east. In addition, a separate zone of copper, platinum and palladium bearing sulfides was discovered at Cannery Creek on the western side of the project. The zone remains open to the north and east.

**BRAVO VENTURE GROUP INC.** announced initial drilling results from its

Woewodski Island project in southwest Alaska. The company completed its initial 1,557-meter, nine-hole drill program on three of 10 targets now identified on the 77 square kilometer property. Assay results are now available for the first three holes of the first-ever drilling at the Mad Dog target. Significant drill intervals include 5.3 meters grading 437 grams of silver per tonne, 3.79 percent lead and 18.45 percent zinc in hole MD04-01, 17 meters grading 223 grams of silver per tonne, 0.97 percent lead and 11.27 percent zinc in hole MD04-01, 2.3 meters grading 131 grams of silver per tonne, 0.59 percent lead and 15.98 percent zinc in hole MD04-02 and 1.8 meters grading 361 grams of silver per tonne, 3.78 percent lead and 10.95 percent zinc in hole MD04-03.

Geologic interpretation suggests that MD04-01 drilled very close to a vent area, with MD04-04 (assays pending) intersecting an up-thrown block on the west. Significant mineralization should continue to the south and southwest under Mad Dog Island, down dip of current drill holes. Drill results for the final hole at Mad Dog, three holes at the Lost Lake and two holes at the East Lake targets are expected over the next few weeks. The company indicated that field work is continuing at Woewodski, including additional sampling of younger shear-hosted "blue quartz" veins, where several initial grab samples contain plus 10 grams per tonne of gold.

**Other**

Alaska Rep. Hugh "Bud" Fate introduced a bill that was recently signed into law that removes one of the more draconian stipulations from the Alaska mining regulations. Under previous regulations, failure to pay rents or file paperwork on

see **FREEMAN** page 8

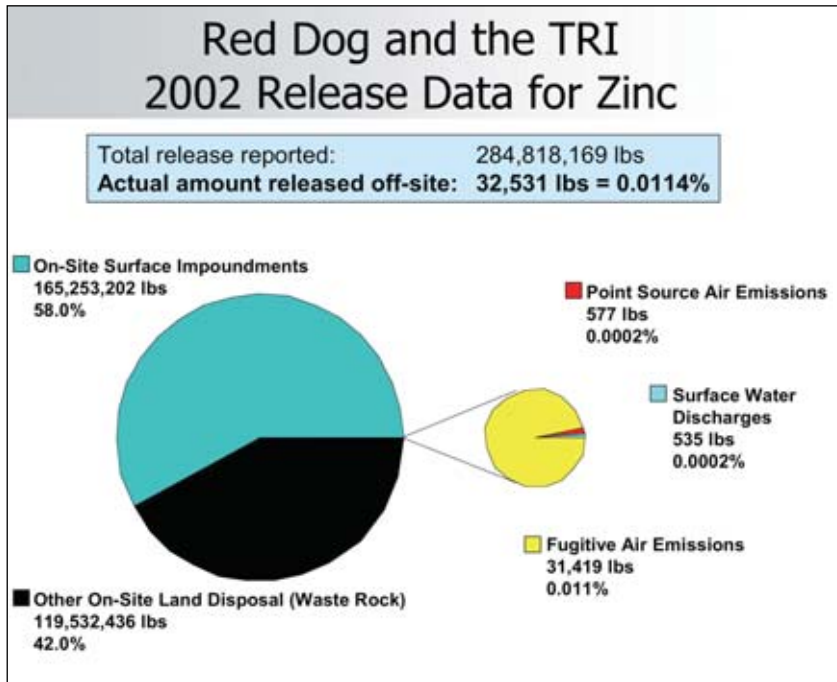
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## RED DOG

materials were reported released to EPA in 2002. Of that, 26 percent came from the metals mining industry and 23 percent from electric utilities, according to EPA's website.

A recent change in the method of counting those rock-hosted minerals in the mining industry also helped boost Red Dog to the top of the toxic release list, Kulas said. Called the Barrick decision, mines were allowed to exclude waste rock from their toxic inventory report if mineralization contained less than 1 percent of metals.

But that cutoff for waste rock doesn't fit Red Dog, which does not mill any rock with less than 1.7 percent mineralization, Kulas said. "That's an indication of doing business in Alaska, where it costs more to operate," he said. "Our cutoff is significantly higher."

Mining operations were first included in the EPA toxic report in 1998, 12 years after the first TRI report was authorized under the Emergency Response and Community Right to Know Act. Originally the intent was to provide the public with information about what toxins manufacturers and chemical plants were releasing into the environment.

In 1998, EPA expanded the list of facilities required to report to include six other industries, including mining. In its first year of inclusion on the TRI, the mining industry reported more than 3 billion pounds of "releases." In 2002, that dropped to less than 1 billion pounds, thanks to the Barrick court case.

"The addition of mining significantly changed the annual inventory with mining immediately rising to the top of the report due to the very nature of the min-

ing process," said Steve Borell, executive director of the Alaska Miners Association, in a press release. "The TRI report does not distinguish between toxic releases to the environment and the huge quantities of naturally occurring substances that are disturbed as part of the mining process but are not released into the environment."

### Misleading view of mine

Red Dog's report creates a distorted picture of the actual potential for human health or environmental risks, the company said in its press release. Large volumes of waste rock or tailings are moved around but the contained metals are not released, and do not pose any risk to the public.

Furthermore, the mine's nearest settlement, the village of Noatak, is 45 miles away. The coastal village of Kivalina is about 17 miles from the port site on the Chukchi Sea for concentrate loading, and that is about 55 miles from the mine and mill facilities.

"We are concerned that the TRI report is going to be misinterpreted and misrepresented. In fact, at Red Dog we work very hard to ensure that our mining practices are designed to minimize the impacts to the environment," said Helvi Sandvik, president of the NANA Development Corp.

Red Dog is on land owned by NANA, the Native regional corporation in the northwestern part of Alaska. Teck Cominco leases land from NANA and operates the mine and mill, and markets the mineral concentrates. The state-owned Alaska Industrial Development and Export Authority owns the mine's transportation system, which consists of a road system, the port and storage facilities. ●



Red Dog is on land owned by NANA, the Native regional corporation in the northwestern part of Alaska. Teck Cominco leases land from NANA and operates the mine and mill, and markets the mineral concentrates.

## • NORTHWEST TERRITORIES

# Rescuing the diamond cutters in NW Territories

Two of four firms placed in interim receivership; territorial government offers cash backing to one of companies

By GARY PARK

Mining News Calgary Correspondent

Canada's diamond industry has had its wings clipped, just as it was taking flight.

The Yellowknife operations of Sirius Diamonds and Arslanian Cutting Works NWT, holding a combined C\$17.2 million in government loan guarantees, were forced into interim receivership in mid-June, triggering an emergency response from the Northwest Territories government.

The plants employed about 90 people. The territorial government said June 23 it would continue to backstop Arslanian, by introducing new partners and ensuring that the firm's bank loan of C\$9.2 million was paid off.

Northwest Territories Finance Minister Floyd Roland said the loan guarantees would be extended for another five years.

"Everyone's a little bit nervous about the industry so we've agreed to back up any loans they've put in place," he conceded.

An earlier deal was reached whereby a subsidiary of Montreal-based Basal Diamonds will pay C\$9.2 million for 75 percent of Arslanian's plant.

### Government says firms in financial trouble

Roland said both Arslanian, North America's largest diamond cutter, and Sirius were in financial trouble — a claim the two firms deny.

"We tried to work with them before going through this process to resolve the issue, but unfortunately that wasn't able to happen," he said.

Roland said the government had been concerned about the viability of Arslanian and Sirius for some time, but delayed any action until told by the Royal Bank of Canada that it was going to demand payment of the Sirius loan.

A spokeswoman for Arslanian said the company had been meeting its obligations when the government "just swooped in."

In Arslanian's case, Roland said it was "timely to move as we did to protect the public purse."

A Sirius spokesman insisted his firm was also up to date with its interest payments, although he admitted it may have failed to maintain a certain equity stake in

the Yellowknife plant.

Roland said the new arrangement is better for the territory because the revised guarantees will be based on a percentage of the restructured plant's assets. The new owners will add their personal guarantees to the loans.

### Governments have subsidized industry

In a bid to capitalize on Canada's sudden emergence as the world's third largest diamond producer behind Russia and Botswana, the governments of Canada and the Northwest Territories have employed a number of strategies, including various subsidies, to build a domestic diamond cutting sector, despite warnings that the manufacturing operations were not very profitable.

In the process, Canada has found itself going head-to-head with countries such as India, where labor costs are dramatically lower.

The Northwest Territories and Nunavut Chamber of Mines issued a recent report that portrayed diamond cutting as a failing secondary industry and argued governments should have no part of the sector.

Tiffany and Canada Dene Diamonds also have manufacturing plants in Yellowknife that operate without loan guarantees, although Canada Dene needed to go through a reorganization after encountering financial problems.

However, in the midst of the manufacturing woes, De Beers said in June that it had successfully concluded a drawn-out regulatory process and would build a diamond mine at Snap Lake in the Northwest Territories.

The final approval involved a water license from the Canadian government, which opens the way for De Beers to join BHP Billiton's Ekati mine and Rio Tinto's Diavik operation, possibly as early as 2006.

De Beers, which is 45 percent owned by Anglo American, has been shut out of the United States for decades, accused of breaching anti-trust laws, but there have been reports of discussions with the U.S. Department of Justice to resolve the impasse.

In the meantime, analysts believe it is important for De Beers to have a mine in Canada, should it be allowed to sell directly into the U.S. market. ●

continued from page 7

## FREEMAN

state claims prior to Nov. 30 meant the claims became null and void with no opportunity to repair the damage for at least one year. Under the recently signed law, mining claim owners who fail to pay claim rents or file required annual labor will be able to "claw back" their claims by paying the rents due and by paying a late penalty equal to the amount of the rent originally due. The bill was passed unanimously by both houses of the Alaska legislature. Well done Bud!

The brilliant wit Will Rogers once said that "everyone is ignorant, only on differ-

ent subjects." In a May 21 Opinion piece in the Anchorage Daily News, Port Allsworth resident John Branson incorrectly stated that cyanide would be used to recover gold from rock if the Pebble copper-gold deposit ever becomes an operating mine. In Mr. Branson's mind the cyanide would pollute the countryside while "hundreds of bulldozers transform the rolling tundra hills into a gaping pit..." Perhaps I am ignorant but I know of no mine on this planet that utilizes "hundreds of bulldozers" and anybody who is familiar with the Pebble deposit and deposits like it around the world can tell you that cyanide is not used to recover the gold. It seems that John Branson is ignorant about mining. ●



• JUNEAU, ALASKA

# Kensington project permitting plods ahead

Draft permits for gold mine released by state and federal regulators; company revises economics of development

By **PATRICIA LILES**  
Mining News Editor

**A**laska state and federal regulators overseeing the proposed Kensington Gold Mine project 45 miles northwest of Juneau have released draft permits, public notices and state decisions for public review and comment.

Released on June 21 were draft permits for water discharges and wetlands disturbances, released by the Environmental Protection Agency and the U.S. Army Corps of Engineers.

Alaska regulators also released draft decisions for two tideland leases for marine terminal facilities, a temporary road closure, road construction and use, fish passage permits and two water right authorizations.

Idaho-based Coeur d'Alene Mines Corp. is seeking regulatory approval to build at the Kensington hard rock deposit an underground gold mine and mill facility capable of processing 100,000 ounces of gold each year for 10 years.

Public hearings to discuss the regulators' proposed permitting decisions have been scheduled in Juneau on July 26 and in Haines on July 27. Comments are due to regulatory agencies by August 5.

A final supplemental environmental impact statement, which is being prepared by a contractor hired by the U.S. Forest Service, is now scheduled to be released Nov. 5, according to project manager Steve Hohensee.

Final permits should be released following that environmental review, according to Ed Fogels, project manager for the Alaska Department of Natural Resources. The actual release date for final permits depends on an appeals period that follows the final supplemental EIS release, he said.

## Permitting process delayed

The June release of the draft permits and the late January release of the draft supplemental EIS are months behind schedule, according to a July 2003 memorandum of understanding between regulatory agencies and the project's developer. That document outlined a schedule for permitting work with a final supplemental EIS review expected in January 2004, allowing the company to begin construction this year.

Water handling issues involving the company's proposed tailings disposal system have been one of the main hold-ups in the permitting process, regulators said. "It's not common to place tailings in a lake," said Hohensee.

Before issuing its draft permit, EPA regulators requested that Coeur provide additional background data and produce an additional potential water treatment plan, a time-consuming process, Fogels said.

State permits will be ready to go as soon as possible after the comment period closes August 5, he added.

The U.S. Forest Service decided to slow down the supplemental EIS process earlier this year in order to coordinate its completion with the final permit issuance, Hohensee said. "It was a choice. We decided that the project as a whole would be better if everything was in correspondence."

Advancing the supplemental EIS doc-



The camp at the Kensington gold project being developed by Coeur d'Alene Mines Corp. some 45 miles north of Juneau, Alaska.

ument without the draft permits could have created some conflicts in the regulatory approvals, he added. "We could be selecting something that's not entirely permissible," Hohensee said.

Regardless of the changing permit schedule, Coeur's bottom line is its goal to begin gold production at Kensington in 2006, according to Tony Ebersole, director of investor relations. The company estimates construction of the project will take 18 months.

"There's been good cooperation between the government agencies and that's been a real positive," he said, in a telephone interview July 6.

The company will make its final decision whether or not to build the Kensington mine after it receives all of its permits, Ebersole said.

## Increased capital costs

Estimated construction costs are \$91.5 million, with projected cash operating costs of \$220 per ounce of gold. That's an increase over recent estimates of \$75 million previously released by Coeur, due in

part to the recent rise in diesel fuel prices, Ebersole said.

Even at the \$91.5 million in construction costs, Kensington is "still profitable," he said.

And the project's economics could improve, once mining begins. Current reserves contain about 1 million ounces of gold, with an average grade of 0.25 ounces of gold per ton of rock. Additional higher-grade mineralization has been identified at the underground deposit, an estimated 2.4 million tons measuring 0.302 ounces per ton, or an additional 724,800 ounces of gold, according to a recent Coeur press release.

"This much higher grade of mineralized material indicates a strong opportunity to increase the Kensington mine life by as much as 50 percent beyond our initial estimates, which significantly enhances project economics," said Bob Martinez, president and chief operating officer of Coeur, in a June 28 press release. "Meanwhile, we still see significant exploration upside potential at both Kensington and the adjacent Jualin prop-

erty."

## Third regulatory review

This is the third time regulatory agencies have reviewed the Kensington project under the National Environmental Policy Act since the original plan of operations to develop a gold mine was submitted in 1990. While receiving past regulatory approval, no mine has ever been built at Kensington, a few miles inland from Comet Beach on Lynn Canal.

Coeur has been involved in the Kensington project since 1990, developing initial plans with partner Echo Bay Exploration. Now, Coeur is the sole developer of the project.

Low gold prices caused Coeur to look for ways to reduce Kensington's capital costs and to accomplish that, the company modified its proposed development. Coeur submitted an amendment to its approved 1998 plan of operations, changing the location for site access. Mine entry is now proposed at the Jualin gold prospect, with a tunnel connecting to the Kensington workings.

Coeur has also proposed a change in the tailings disposal system by placing them in the Lower Slate Lake. The company also wants to eliminate the proposed on-site employee camp, instead ferrying workers to the Slate Creek Cove from Cascade Point, then busing them five miles to the Jualin mine site.

Such changes require a supplemental EIS to the existing permits, according to the Forest Service, which is serving as the lead federal agency. Therefore, in the draft supplemental EIS document, a no action decision would require the developer to build Kensington as it was previously proposed and approved in the late 1990s.

## Draft permit details

Of the draft permits released late last month, EPA proposes to issue a National Pollutant Discharge Elimination System permit for discharges to East Fork Slate Creek, with ongoing discharges to

see **KENSINGTON** page 13

**AngloGold keen on Alaska**  
Major plans drilling, more land acquisitions

**Pebble activity heats up**  
Claim staking continues around gold-copper deposit, fourth player announces land holdings

**Israeli firm bids again**  
DGI Group gets light-hearted response from BHP Billiton regarding Ekati diamond mine

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• ILLIAMNA, ALASKA

# Area near Alaska's Pebble deposit booming

Northern Dynasty boosts spending on large porphyry project, exploration starts on other properties in area

By PATRICIA LILES

Mining News Editor

The skies north of Lake Iliamna in southwest Alaska are buzzing with helicopters that are supporting numerous drill crews working on exploration projects at and surrounding the Pebble gold-copper-molybdenum-silver deposit.

Leading this summer's activity is Northern Dynasty, a Hunter Dickinson managed mine-development company, which holds options to acquire a 100 percent interest in 36 mineral claims that host the Pebble deposit.

Northern Dynasty bumped up this year's spending plan for Pebble to a total of \$25 million in U.S. dollars, \$33.5 million Canadian, according to Bruce Jenkins, director of corporate affairs. In early February, the company announced plans to spend \$15 million on Pebble, then later revised that upward to \$20 million.

This year's work is designed to collect the engineering, environmental and socioeconomic data needed to complete in 2005 a bankable feasibility study and for permit applications to build a large-scale, open pit mine and mill. The company's preliminary plans call for a facility capable of processing from 90,000 to 200,000 tonnes of ore per day over a 30 to 60 year mine life.

Northern Dynasty's spending increase will cover several different aspects of this year's work plan, Jenkins told Mining News on July 6.

"We've added more in-fill drilling, because the size of the probable pit is larger, and some more geotechnical drilling," Jenkins said.

The scope of environmental studies has also expanded, and the company's contractors are conducting a much larger water quality analysis, he said.

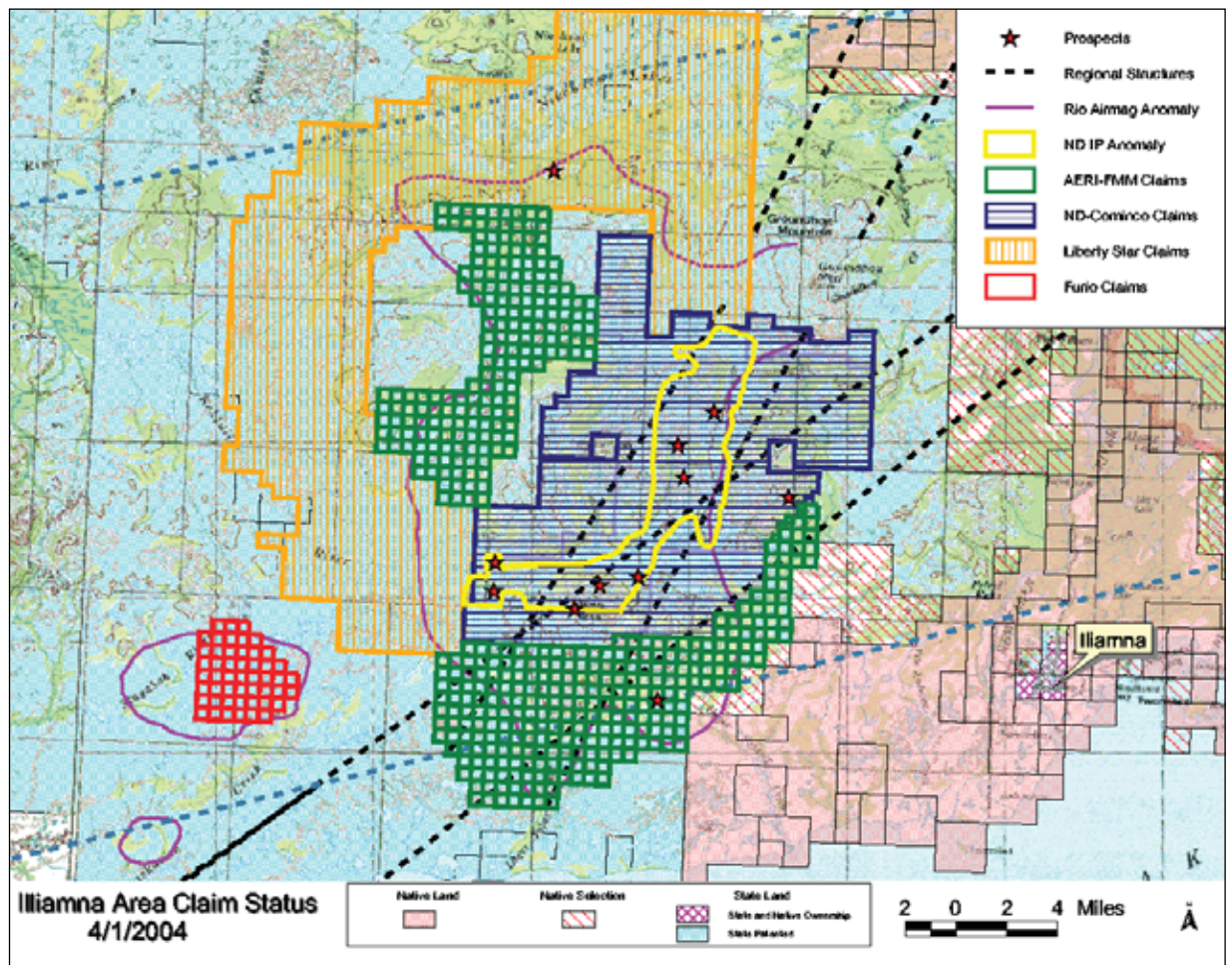
"We've also revised our estimate of helicopter use," Jenkins said, adding that additional flight time to support the larger scope of work at the remote property is necessary.

So far, the company's work force at Iliamna and at Pebble has peaked at 43 people, Jenkins said. "It's going exceptionally well and our programs are progressing on pace," he said. "We should have lots of good news coming out in August and September, as we begin compiling numbers."

## Initial meetings with state regulators

Northern Dynasty also plans to host another series of public meetings in August in communities near the Lake Iliamna area, to update Pebble's neighboring residents about the company's plans.

In addition, Northern Dynasty has met with state regulators and plans similar meetings with federal regula-



tors to discuss a future mine development permit application. A study plan, outlining the scope of environmental data gathering, has been submitted to the Alaska Department of Natural Resources, Jenkins said, while the permit applications will likely be submitted to regulators next year.

Northern Dynasty acquired an option on the Pebble property in 2002 from Teck Cominco and since then, has focused its extensive drilling work on the known mineralized zone. The company announced in January 2004 a new inferred resource for Pebble, containing 26.5 million ounces of gold and 16.5 billion pounds of copper.

Now, Northern Dynasty's job is to prove up their geological estimate for Pebble. This year's drilling includes substantial infill work designed to move the inferred resource to the measured and indicated resource category, a more certain geological estimate of underground mineralization.

Four drill rigs are working on site, with plans to complete more than 130,000 feet of samples this year. In addition to infill drilling, some exploratory drilling for

new zones and unexplored targets is planned, the company said in a May 5 press release.

"As currently defined, the Pebble deposit is open to the east, west and to depth, with the higher grade mineralization open to the south and the southeast," the company said.

## Surrounding interest

Other companies interested in the Pebble area staked a large number of state mining claims nearby in late 2003.

A recently formed Vancouver, British Columbia-based junior exploration company, Full Metal Minerals, this spring optioned claims staked by Alaska Earth Resources Inc.

Full Metal announced July 6 that the company started work earlier this year on its Pebble South claim block, a 300 square kilometer (115 square mile) section of land south of Northern Dynasty's Pebble property.

see **PEBBLE** page 13

continued from page 4

## FORT KNOX

use the mine site, Wild said.

Tracked equipment such as loaders and bulldozers which was not already working in the pit was parked on the waste dumps.

Mill operators began procedures to shut down the mechanical and chemical processes that extract the microscopic gold from its host rock, a process completed by 8 p.m., Wild said. "We coordinated with GVEA for our electric usage, so we would not take a load off the system quickly."

Mill operations shut down in phases, although crews did not take the final emergency step of emptying large thickener and leach holding tanks, Wild said.

A road block and closure of the Steese Highway prevented the mine's night crew from coming to work that evening, although managers attempted to contact employees earlier in the day after receiving the evacuation notice.

Wild and a small group of employees remained on-site during that night to



All of the "rolling stock" of large earthmoving equipment was moved and parked at the bottom of the pit, potentially protecting the equipment from fire and keeping it consolidated in case fire crews needed to use the mine site

monitor the situation. The next day, July 1, Wild sought permission from fire managers to allow a small crew to return to

Fort Knox to resume partial mill operations. Two dozer operators also returned, in order to feed the mill from a stockpile

of material.

"They were very cooperative in helping to bring our people through the line on the Steese Highway," Wild said.

Full work crews began returning to work later in the week and by July 3, the mine and mill had returned to its normal production levels, Wild said. Typical mine production rates vary between 94,000 and 130,000 tonnes per day, with an average of 37,650 tonnes per day of ore that is processed through the mill.

Despite clearing conditions in the area, the Steese Highway remained closed July 6, although Fort Knox workers are allowed access to the mine with proper employment identification.

Wild is pleased with the employees' response to the emergency situation, despite a lack of practice or drilling for such a situation. About a month ago, the company started work on a crisis communication and development plan, he said, and the fire evacuation put to test those procedures.

"Employees clearly demonstrated their ability to act quickly and thoughtfully," he said. ●

COURTESY OF FAIRBANKS GOLD MINING INC.

• NORTHWESTERN B.C.

# Expanding British Columbia's Galore Creek

Three drill rigs working on NovaGold's remote gold-silver-copper project; scoping study expected later in July

By **PATRICIA LILES**  
Mining News Editor

**A**lready a giant-sized deposit containing lots of gold, silver and copper, Galore Creek's allure is in its undefined expansion potential, according to the property's developer.

NovaGold Resources and its Canadian subsidiary, SpectrumGold, have started drilling work this summer to find out how much more of those precious metals remain to be discovered. Three drill rigs are currently turning at the remote Galore Creek, a gold-silver-copper porphyry deposit optioned by the Vancouver, British Columbia, junior last year.

Last fall, the company took its first geological stab at Galore Creek, completing about 10,000 feet of drilling on the property. This summer, the company plans to complete about 60,000 feet, said Greg Johnson, NovaGold's vice president of corporate development.

"We drilled eight new holes on the edges of the deposit to see how open the main deposit was," Johnson said, in a telephone interview July 5, referring to last fall's drilling. "That work resulted in a 15 percent increase in the resource.

"We have a good idea that the system is open and that there is good expansion potential."

Galore Creek, about 36 miles west of the Cassiar Highway and about 56 miles east of Wrangell, Alaska, is one of the company's high profile exploration projects in 2004.

NovaGold and SpectrumGold optioned last summer the large-scale, well-defined mineralized deposit called Galore Creek, previously worked by Kennecott. The company plans to spend C\$8 million on it this year, which includes engineering work, drilling, airborne and ground-based geophysical surveys and environmental baseline data collection.

## Three goals for drilling work

Two of the drill rigs have been working on site since late June and the third started up on July 5, Johnson said.

"We're also finalizing our improvements to our camp facilities," he said. "Right now we have over 50 people in camp and we're expanding its capacity to support about 70 people."

Goals for this year's drilling program are threefold, Johnson said. They include upgrading the existing inferred mineralization to the measured and indicated category, drilling the edges of the deposit in an attempt to find new mineralization and testing satellite deposits for new, nearby resources.

For example, one of the three drill rigs currently working is at the Copper Canyon prospect, about three miles southeast of the main Galore Creek mineralized zone.

Another targeted satellite area that will receive some prospecting attention this summer is the North Junction Zone, Johnson said.

The company will also take a look this summer at the Grace claims, which were optioned this spring from Pioneer Metals.

"There's not a defined zone of mineralization there, but the potential exists," Johnson said. "Historically, some drilling hit gold mineralization there, but we're going to take a comprehensive look for all

## Prepping Rock Creek for production

The modest-sized gold deposit called Rock Creek may not attract a lot of market attention for its developer, NovaGold Resources, but it could quickly transform the Vancouver, British Columbia, exploration firm into a low-cost gold producer.

The company has begun its \$5 million spending this year to develop the Nome, Alaska-area hard rock deposit into a producing mine, hopefully in 2006. Crews have mobilized one drill rig to the site, according to Greg Johnson, NovaGold's vice president of corporate development. A second drill rig is expected soon, he said on July 5.

"It's not our biggest project and it doesn't get much attention from the markets, but it would be our first operation with production, other than our sand and gravel business," Johnson said.

A combination of core and rotary drilling work, which will make up about \$2 million of the 2004 Rock Creek budget, will gather "additional test work and convert part of the resource to reserves," Johnson said.

Crews have been on-site this spring, completing engineering and environ-

see **ROCK CREEK** page 12

three (metals)."

## Geophysics also planned

Exploration crews at Galore Creek this summer will also conduct ground and airborne geophysical surveys, looking for mineralization indicators and additional drill targets. The company plans to complete about 50 line kilometers of ground geophysics and about 900 line kilometers of airborne geophysical surveys, Johnson said.

The work, in particular the airborne surveys, will cover much of the 75,000 acres of land now part of the Galore Creek project held by NovaGold and SpectrumGold.

In addition to the Grace claims, the holdings include other prospective land nearby called the Jack and Spaler Creek claims, optioned from Silver Standard.

The existing main zone of mineralization at Galore Creek is roughly four kilometers long, by one kilometer wide, Johnson said. Mineralization begins at surface and is fairly continuous down to about 300 meters or 1,000 feet.

## Scoping study work almost complete

While drill crews are ramping up work at Galore Creek, the company is preparing to release an independently-produced, preliminary economic assessment report, or scoping study, for Galore Creek.

That document, which offers an engineering and economic assessment of the known deposit, should be released later this month, Johnson said.

Part of that report will look at logistical needs to develop the remote project, currently a fly-in operation. Two road routes are being considered, Johnson said, and economic factors relating to each will

see **GALORE CREEK** page 12



COURTESY SPECTRUMGOLD

Galore Creek, about 37 miles west of the Cassiar Highway and about 46 miles east of Wrangell, Alaska, is a large, well-defined gold-silver-copper resource previously worked by Kennecott.

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● MCGRATH, ALASKA

# Permitting issues delay Nixon Fork startup

*Additional water discharge permit needed at shuttered mine; Mystery Creek plans to produce gold by re-treating tailings*

By **PATRICIA LILES**

*Mining News Editor*

**D**espite a permitting delay to restart mining in the underground, shuttered Nixon Fork gold-copper mine in central Alaska, developers hope to begin producing gold from existing mine tailings this fall.

Mystery Creek Resources Inc., a wholly owned subsidiary of publicly traded, Toronto-based St. Andrew Goldfields Ltd., submitted to regulators this spring a new five-year plan of operations for Nixon Fork, 35 miles northeast of McGrath, Alaska. The mine has been moth-balled for the last five years, and will require substantial work to recommission, the company said.

Mystery Creek plans to refurbish the existing mill, change the extraction process to allow for gold and silver dore production on-site and drive new tunnels connecting two drifts. The company hoped to start production by the end of this year, but according to a June 28 press release, underground mining will be delayed, probably until the third quarter of 2005.

That's because the company must apply for an additional National Pollutant Discharge Elimination System permit from the Environmental Protection Agency.

"In order to satisfy the necessary technical requirements to prepare this application, additional dewatering tests, water quality analysis of both the underground ground water and receiving streams, stream hydrology and an aquatic analysis of the receiving streams will be necessary," the company said in its press release. "It is estimated that these technical requirements will be completed by the end of the summer of 2004 and then the application will be submitted. It is anticipated that this NPDES permit could be issued in the spring of 2005."

Capital costs to start production at Nixon Fork have been estimated at \$10 million, according to Mystery Creek President Paul Jones, with cash operating costs estimated at \$265 per ounce of gold.

## Re-treating tailings to extract gold

While working on its water discharge permit, Mystery

Creek plans to start gold production by re-treating existing mine tailings on site, beginning this fall if the necessary permits can be obtained in a timely manner, the company said.

Auger drilling in the existing Nixon Fork tailings has indicated grades ranging from 0.16 ounces to 0.9 ounces of gold per ton of rock. The company estimates that 80,000 tons of tailings contain approximately 20,000 ounces of gold.

Preliminary metallurgical tests indicate that up to 36 percent of the gold in the tailings could be recovered by a gravity circuit, and up to 80 to 90 percent of the gold not recovered by gravity could be extracted by the proposed metallurgical process the company plans to use on ore mined in the future.

The company estimates that approximately 40 tons of tailings could be excavated per hour and treated in the gravity circuit, producing about 1,600 ounces of gold per month with operating costs less than \$100 per ounce.

"Further technical studies and permitting for the tailings re-treatment operations are under way," the company said.

The company hopes to begin re-treating tailings this fall, before new lower-grade tailings are added to the stack after underground mining restarts next year. "This gold would be otherwise lost if underground production deposited new lower grade tailings on the existing tailings," the company said in its press release.

Average gold grade of Nixon Fork ore during its last year of operation, in 1998, was 1.3 ounces of gold per ton of rock.

Existing geological estimates of gold remaining at Nixon Fork include an indicated resource of 71,900 ounces and an inferred resource of 64,400 ounces, with an average grade of one ounce of gold per ton of rock, Jones said previously.

## High grade drill results reported

Crews began drilling at Nixon Fork in January, continuing throughout the spring with an underground program. Previously, St. Andrew announced plans to spend more than \$3 million on two phases of drilling, scheduled to be

completed last month.

In its June 28 press release, St. Andrew said that 78 diamond core drill holes, totaling 8,600 meters (28,214 feet) have been completed, most drilled from the underground exploration drift.

The company now plans to continue the underground drilling to the end of 2004, with expectations that the work will increase the resource base by 120,000 tonnes. That will add significantly to the existing resource of 69,000 tonnes in the indicated resource and 76,000 tonnes in the inferred category.

Drilling tested two zones previously mined at Nixon Fork, an area that will likely produce new ore when underground mining resumes. The work confirmed the depth of mineralization and indicated a longer strike of the C-3000 zone. The best results from that area produced a three meter interval grading 46.9 grams of gold per ton of rock (9.8 feet at 1.5 ounces of gold per ton of rock).

Crews are continuing to drill the C-3300 area, and the company said that work has confirmed mineralization to 60 meters below the current workings, part of the inferred mineralization reported. Intercepts from 20 drill holes were released last month, and the company said assays are pending for 17 more holes.

The best results included an 11-meter intercept with a grade of 79.3 grams of gold per ton of rock, (36 feet at 2.54 ounces of gold per ton), a 10.1-meter intercept with a grade of 74.5 grams (33 feet at 2.39 ounces of gold per ton) and a 5.5-meter intercept with a grade of 299.5 grams of gold per ton of rock (18 feet at 9.62 ounces of gold per ton).

St. Andrew believes the high-grade drill results indicate potential to discover additional high-grade ore bodies in the region.

"The margins of the Mystery Stock are particularly prospective to host similar skarn-type mineralization and the area that has been explored to date represents less than 10 percent of the potential area for skarn-hosted mineralization," the company said.

Modeling completed in 2003 by the company's subsidiary, Geoinformatics, indicated a number of targets for such skarn-type of mineralization, the company said. ●

*continued from page 11*

## GALORE CREEK

be included in the scoping study.

One route would connect Galore Creek to the Cassiar Highway community of Bob Quinn, roughly a 36-mile route through mountainous terrain. The second would connect to an existing road used by another mine project, a 100-mile stretch that would be at lower elevation.

In addition to economic factors, NovaGold and SpectrumGold will consider input from the Tahltan First Nations, the Native tribe in that region, Johnson said. "We'll be looking at the best

approach for the region."

The company has already met with Canadian agencies to discuss the permitting and regulatory process, and have had discussions with U.S. agencies about the potential mine project. "We want to make sure early on that we engage the U.S. agencies in this situation," Johnson said. "Full oversight will come from the Canadian regulatory agencies, but we've had two meetings in Juneau with all the Alaska and federal U.S. regulatory agencies to keep them updated."

## Resource updated for Galore Creek

The new geological estimate calculated by an independent engineering firm

using drill samples taken last fall as well as historical drill data shows that Galore Creek is "a very large, high quality, porphyry-related gold-silver-copper deposit," company president and CEO Rick Van Nieuwenhuysen said in a press release.

The indicated resource contains 4 million ounces of gold, 52.2 million ounces of silver and 4.6 billion pounds of copper. Mineralization contained in the inferred

category includes 1.2 million ounces of gold, 17.2 million ounces of silver and 1.3 billion pounds of copper. Both categories use a 0.5 percent copper equivalent cut-off grade.

NovaGold and SpectrumGold released their updated resource numbers this spring, which showed an increase of 15 percent for gold and 14 percent for copper compared to historical geological estimates. ●

*continued from page 11*

## ROCK CREEK

mental work needed for the company to make a development decision. In addition, NovaGold is waiting to complete a full year of environmental baseline data gathering before submitting official permit applications.

"We've been speaking with the regulatory agencies and getting guidance," Johnson said.

The company will complete a year's worth of groundwater data collection in early September, according to Doug Nicholson, NovaGold's vice president and general manager for Rock Creek. Air quality data collection will surpass that year's anniversary at the end of 2004, he said in a telephone interview on July 6.

Permitting is "more defensible" with a year of baseline data collection prior to the start of the regulatory process, Nicholson added.

An environmental assessment for Rock Creek is due to be released in October, and NovaGold will likely submit its actual permit applications to regulatory agencies after

that, Nicholson said.

The company hopes to have confidence of regulatory approval so that managers can order equipment to be delivered to Nome during the next summer's shipping season, Johnson said.

A preliminary economic assessment study of Rock Creek has identified a potential gold mine that would produce more than 100,000 ounces per year with a total cash cost of about \$200 per ounce of gold. A final feasibility study is expected to be released later this year, as work is continuing to support that, as well as an updated resource and reserve number for Rock Creek.

NovaGold anticipates a year-round mine and milling operation, processing about 5,000 tons of material a day, with a 4:1 strip ratio. Overall recovery with a gravity floatation plant is projected at 96 percent.

Past exploration has identified a gold resource containing more than 1 million ounces of gold at Rock Creek and the adjacent Saddle deposit. Both deposits are open along strike and down dip; further drilling will likely increase the size of both deposits, the company said on its website.

—PATRICIA LILES, Mining News editor



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**Full Metal starts drilling at Ganes Creek, Gunsite**

In addition to its Pebble South property, Full Metal Minerals is actively working on two other exploration properties in Alaska this summer.

The Vancouver, British Columbia, junior began drilling in mid June on its Gunsite gold copper porphyry property north of Anchorage in the Talkeetna Mountains. The company also plans two phases of drilling at its Ganes Creek property in the west-central portion of Interior Alaska.

Full Metal holds an 85 percent interest in the 65-kilometer Ganes Creek property. The company plans a first phase of work this summer to include prospecting, detailed geological mapping and soil sampling, mechanical trenching and 1,000 meters (3,280 feet) of diamond core drilling, according to the company's July 6 press release.

"A significant Phase II drill program is planned to test the drill targets identified in this year's program," the company said.

Exploration targets include looking for the bedrock source of the area's placer gold and ultra high-grade gold quartz boulders. Ganes Creek is famous for producing large gold nuggets, including the fifth largest in Alaska's history, the company said, and the majority of these are still encapsulated in quartz.

"The presence of cobble-size quartz with sulphide boxwork and coarse gold suggests that the placer gold is primary and originates from a nearby source," the company said.

The Ganes Creek property is believed to be a faulted-off extension of the Donlin Creek intrusive complex, Full Metal said. Work performed during 2003 shows that the placer gold source at Ganes Creek is formed at a deeper structural level than at Donlin, resulting in dominant native gold and quartz mineralization, the company said.

Crews are also currently working at the Gunsite gold-copper project, completing a planned four to six diamond core drill holes for a total of 750 meters (2,400 feet).

The 3,100 hectare (7,660 acre) property is within 15 miles of an all-weather road, about 86 miles north of Anchorage. Two of four mineralized high-grade zones will be drill tested, the company said.

The company has an interest in one other property in Alaska and two in Nunavut, which have been optioned to Garnet Point Resources Corp. In a June 30 press release, Full Metal said the two companies signed an option agreement, allowing Garnet Point to earn a 60 percent interest in Full Metal's Mac and Cache properties, southeast of Rankin Inlet, in northern Canada.

Garnet Point will make cash payments totaling \$140,000, \$35,000 in the first year, and issuing 1 million shares of its company to Full Metal, along with spending \$4 million on exploration in four years, including \$350,000 during the first year.

The two companies are planning an aggressive surface mapping and sampling program this summer, with drilling planned in the spring of 2005, the press release said.

—PATRICIA LILES, Mining News editor

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**PEBBLE**

A Phase 1 reconnaissance mapping, sampling and regional stream sampling was completed earlier this year, with 1,200 samples collected. More than 35 line kilometers of induced polarization geophysics are planned for the property, with 17 line kilometers already completed, work designed to identify drill targets.

The company's land holdings are located "at the intersection of three major structural trends that are coupled with favorable airborne magnetic anomalies," the company said in a July 6 press release.

**Liberty Star preps for drilling**

The other major player in the Pebble land rush is Tucson, Ariz.-based Liberty Star Gold Corp. Liberty Star's consultant, Fairbanks-based Avalon Development, in December 2003 completed the largest one-time acquisition of state claims in Alaska's mining history.

Liberty Star now holds 981 state mining claims in the Iliamna region, a property called the Big Chunk. This spring the company completed a 1,402 square mile

airborne geophysical survey of the area, with spacing of six lines to the mile. The flight lines covered about 12,500 linear miles, according to the company's June 1 press release.

"The four magnetic anomalies outlined from initial analysis of compiled data will be the subject of immediate ground follow-up," the company said in the release.

In addition, detailed satellite imagery has been used to identify mineral signatures of alterations similar to Pebble, locating three additional targets on the Big Chunk property. Liberty Star plans a geochemical program over those targets, anticipating that work will define additional targets, the company said.

Field offices were opened by Liberty Star in Iliamna on May 26. Zonge Engineering has been retained to provide ground electrical geophysics, IP (induced polarization) or CSAMT (Controlled Source Audio-range Magneto Tellurics) to further refine potential drill targets, work planned for late July or early August.

Drilling on identified targets is expected to begin in the middle to later part of August, the company said. ●



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**KENSINGTON**

Sherman Creek and Lynn Canal. The draft permit sets conditions on the discharge, or release, of pollutants from various types of operations into U.S. waters.

The Corps of Engineers is considering Coeur's application for discharging approximately 611,700 cubic yards of fill and dredged fill materials into 91.7 acres of waters of the U.S. The Corps is also considering an application by Goldbelt Inc. to discharge dredge and fill materials

into waters in conjunction with construction of a moorage facility at Cascade Point.

The Alaska Department of Environmental Conservation has also prepared draft state certifications of EPA's draft NPDES permit and the Corps of Engineer's draft 404 permits.

Finally, the Alaska Department of Natural Resources is considering a lease of approximately 5.8 acres of state tide and submerged lands at Cascade Point in Berners Bay, to be offered at public auction to the highest qualified bidder. ●

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continued from page 3

## FIRE

Remaining on-site at Pogo, about 40 miles northeast of Delta Junction, were 15 employees, who were joined by 40 firefighters.

Twenty construction workers stayed at a road construction camp, about 25 miles west of Pogo on the all-season access road being built, and they were joined by 56 firefighters, Hanneman said.

Although Pogo construction workers have been returning to the job since July 5 after a substantial rainfall helped knock the fire down, firefighters have remained on site, mopping up smoldering vegetation before it reignites.

## Exploration camp burns

The exploration camp set up by Northern Associates lost six "Boonie barn" tents, two wall tents, a generator and other equipment leased from Taiga Ventures.

Drilling core was not lost, nor was the firm's office damaged, Dashevsky said. "We're rolling with the punches," he said. "We'll be drilling by this time next week. The exploration project is moving ahead."

Mike Tolbert, owner of Fairbanks-based Taiga Ventures, said his company had been preparing to ship additional tents and equipment out to the camp to accommodate more workers, just prior to the fire.

"When anything is in the path of these fires, there's not much anyone can do," he said. "They evacuated the crew the evening before (the fire), so it was out of their control."

Smoky conditions made it difficult for the crew to leave, even by helicopter. "They had to go when they had to go," Tolbert said.

"So you move on and take your licks."

The state mining claims in the ER property were staked by Rimfire Minerals and optioned to AngloGold (U.S.A.) Exploration, the operator of the exploration project.

## Pogo work resumes

Fire managers estimate the Camp Creek fire has burned 115,505 acres in the Interior, according to July 7 reports. Three fire fighting crews with 195 workers on Camp Creek reported the fire zero percent contained with no lost structures.

More than 1.9 million acres of land in Alaska has been burned this summer, and more than 1,800 firefighters are in state.

With improving conditions in the Goodpaster valley, construction work has resumed at Pogo. Crews had been preparing to pour the first concrete for the mill foundation on July 1, but that schedule has slipped, Hanneman said. Road crews are also back on the job, and the 49-mile road being built is passable again.

Fortunately for the mine and for firefighters, vehicles could travel the road during the first days of the fire. Some of the Pogo workers left the construction site by driving out the road, while many of the firefighters and their equipment drove in on the road, Hanneman said.

"We decided to send people out before the fire burned out the road," he said. "We didn't want people stranded at the end of the road."

Blackened terrain now borders about 15 miles of the road, which is closed to the public. Industrial users must obtain permits from Teck-Pogo for special use of the road, although that paperwork wasn't necessary for the firefighters, Hanneman said. "We always contemplated that state scientific research and fire support would use the road."

—PATRICIA LILES, Mining News editor

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• INTERIOR ALASKA

# Third Pogo area property optioned by partners

Rimfire, AngloGold expand their joint ventures with third property option, initial reconnaissance planned for this summer

By **PATRICIA LILES**  
Mining News Editor

The partnership between Vancouver, British Columbia, junior Rimfire Minerals and global mining giant AngloGold (U.S.A.) Exploration continues to grow, as the two companies announced in late June their third property option agreement for a prospect near the Pogo area.

Now optioned by AngloGold, the Beverly claim group is on the eastern boundary of the Pogo project in the upper Goodpaster River Valley in Interior Alaska, a high-grade gold deposit being developed by Teck Cominco and Sumitomo Metal Mining Co.

"From a geological standpoint, it's a very key piece of ground," David Caulfield, president of Rimfire Minerals, told Mining News on July 6. "It's on a straight line with the Pogo trend and the Liese zones, which are trending north-northwest and south-southeast."

The Beverly claim block consists of 202 state mining claims, some of which have recently been staked by Rimfire. Past exploration work on the property has been limited to reconnaissance-scale prospecting, mapping, airborne geophysics and soil sampling, the company said in its June 22 press release announcing the new agreement with AngloGold.

Rimfire's previous work identified a one kilometer by one kilometer area of anomalous gold and pathfinder element soil geochemistry, detected by elevated levels of gold in silt samples and float boulders that assayed 2.4 grams per ton of rock.

"We found some very high silts, more than 1,000 parts per billion (gold) in the creeks and rock samples with more than two grams," Caulfield said. "It's got all the right earmarks of what to look for in that area."

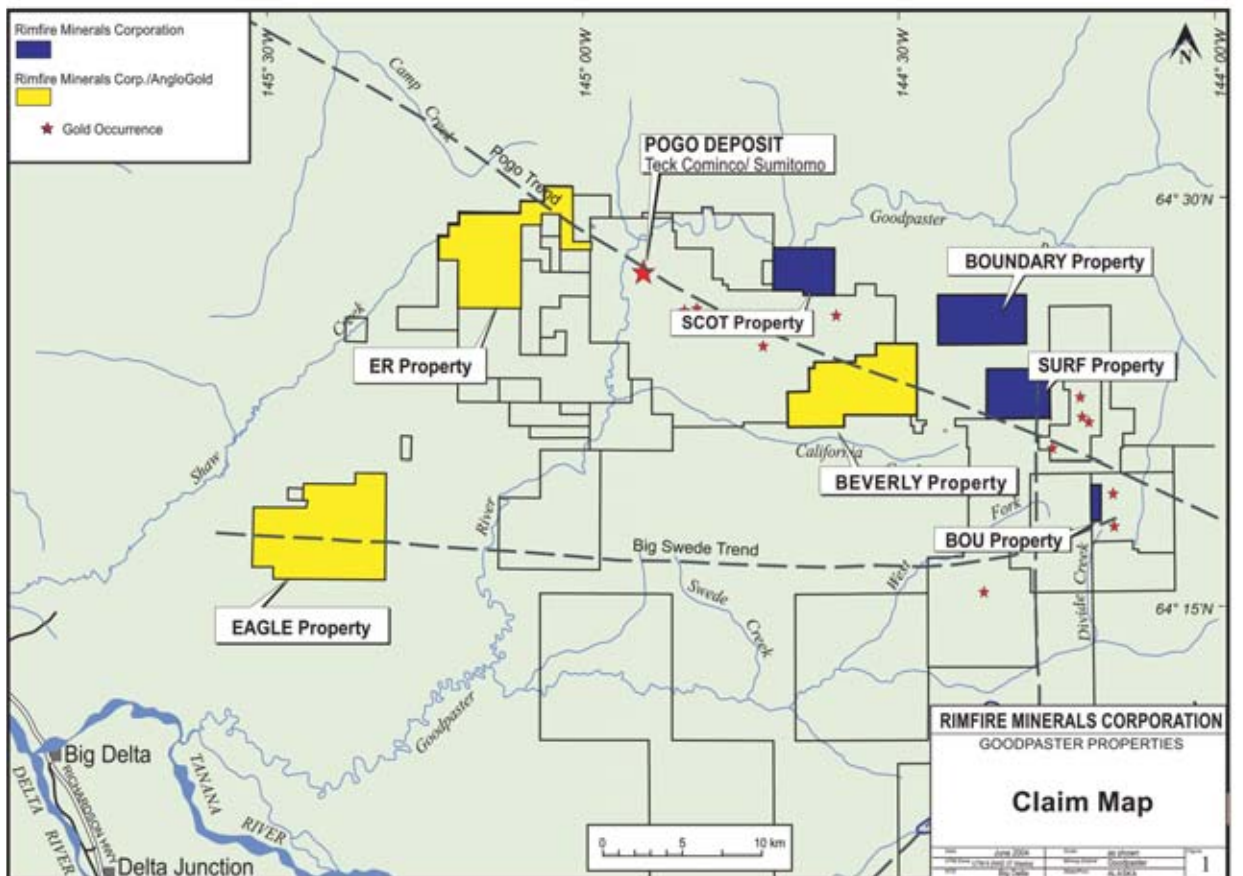
AngloGold plans to conduct initial ground work this summer, taking a first pass on the property, Caulfield said. "Anglo takes a real slow, methodical approach. That's the nice thing about working with a major; they have deeper pockets and don't do things at the whim of the markets."

### Joint venture terms

Under terms of the agreement, AngloGold may earn a 50 percent interest in the Beverly claims by spending \$1 million and paying Rimfire \$200,000 in staged cash payments over four years. AngloGold may increase its interest to 70 percent by incurring an additional \$600,000 in exploration expenditures, all in U.S. dollars. AngloGold also agrees to make cash payments totaling C\$75,000 at certain exploration milestones as required by an underlying purchase agreement.

Upon vesting its interest of 70 percent, AngloGold can earn an additional 5 percent interest by carrying a loan for Rimfire's share of exploration expenses and funding all expenses incurred under the joint venture through to commercial production. The loaned amounts will be paid out of Rimfire's proportionate share of production proceeds.

This makes the third similar partnership between the two companies for ground in the Pogo area. AngloGold has also optioned from Rimfire its ER and the Eagle properties, to the west and southwest of the Pogo claim block. AngloGold



announced earlier this year plans to drill on both of those properties this summer, part of the company's \$2 million budgeted for exploration in Alaska for 2004.

### Land position grows

Both AngloGold and Rimfire, together and independently, have staked additional ground surrounding the Pogo claim block in recent years. In addition to the three properties optioned to AngloGold, Rimfire holds four wholly owned claim groups on the Pogo trend, the company said in its press release. Rimfire's land holdings in the area total 78 square miles.

"We firmly believe the Goodpaster district will develop into one of the premier gold exploration districts in North America now that the Pogo mine is under construction," said Mark Baknes, Rimfire's vice president of exploration, in the company's press release. "AngloGold continues to aggressively expand its presence in the district, and together with Rimfire, jointly controls some of the most favorable ground in the area. Rimfire is pleased to continue its partnership with AngloGold in the pursuit of significant gold discoveries in the Pogo District."

AngloGold has also staked a considerably larger position in the Pogo area, more than 61,000 hectares, according to Jeff Pontius, the company's North America exploration manager. That translates to 150,000 acres, or 235 square miles.

### Anglo's 2004 plans

In past presentations to the mining and exploration industry, Pontius has said that the company's focused exploration

programs in Alaska have "produced encouraging results with potential for new AngloGold greenfields' discoveries."

The company is expanding its regional targeting effort in Alaska, and its land holdings cover seven target areas, three of which are joint ventures. The company drilled a total of 4,020 meters or more than 13,000 feet in 2003, and plans to drill more than 19,000 feet this year on its Pogo area properties and at a prospect at Livengood, about 50 miles north of Fairbanks.

An extensive follow-up program is planned for the ER Project, one of the three joint ventures with Rimfire. AngloGold has already drilled six initial holes in that property prior to this summer, three of which contained visible gold-bearing veins in the Pogo style setting, Pontius said.

It's a large gold-arsenic-bismuth soil anomaly, roughly two kilometers by a half-kilometer in size, on the claim block that now includes about 16.5 square miles of state ground.

Pontius said the company plans an "aggressive soil sampling and drilling program" this summer at the Eagle property, a 24.6 square mile claim block several miles southwest of Pogo.

"Initial prospecting and soil sampling discovered large structurally controlled gold-arsenic-bismuth anomaly" that is roughly three kilometers by a half-kilometer in size, he said in past industry presentations. This year's planned drilling will be the first at Eagle.

In its exploration applications approved by the Alaska Department of Natural Resources, AngloGold requested permission to drill up to 30 core holes on each of the ER and Eagle properties. ●



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