Petroleum news

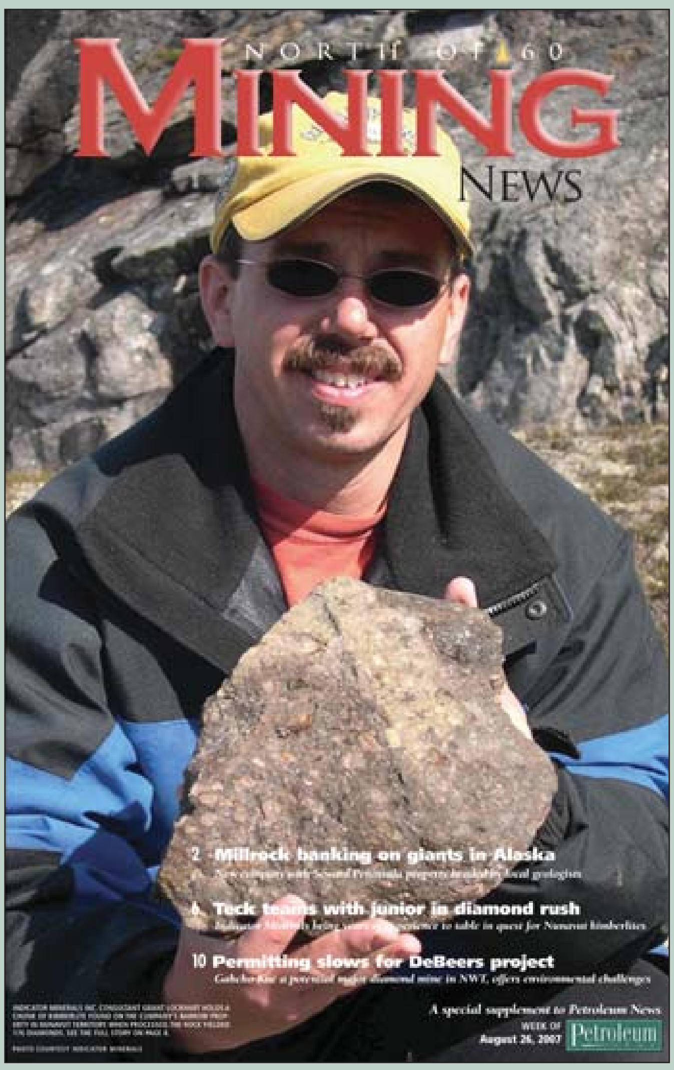
Vol. 12, No. 34 • www.PetroleumNews.com

Published weekly by Petroleum Newspapers of Alaska

Week of August 26, 2007 • $1.50

page 8 Fowler O&G permitting CBM wells for private land in Mat-Su

This month's Mining News inside



Boyd joins Norsk Hydro in Alaska; Arctic Energy Summit extends early bird deadline to Sept. 7

Oil Patch Insider

NORSK HYDRO USA HAS HIRED KEN BOYD as a consultant in Alaska. Jim Meek, manager of business development for the Houston-based affiliate of Norway's mega-major Hydro, said Boyd would be the company's "man on the ground" in Alaska, assisting the company in its "evaluation" of the state as a place to make oil and gas investments and occasionally representing the company at local meetings and events.

Meek said Norsk Hydro currently has no assets in Alaska, but he did confirm that the company had joined both the Alaska Oil and Gas Association and the Resource Development Council for Alaska.

Boyd holds a Master's degree in geology from Rensselaer Polytechnic Institute of Troy, N.Y. He was Alaska's deputy director of the Division of Oil and Gas for

see **INSIDER** *page 3*

B R E A K I N G N E W S

LAND & LEASING

NPR-A in limbo

Draft EIS for Northeast NPR-A out, earliest lease sale after 2008 election

By KAY CASHMAN
Petroleum News

The federal government's plan to open the National Petroleum Reserve-Alaska to oil and gas development has officially been derailed for at least two years, starting with a September 2006 court order that caused the U.S. Bureau of Land Management to halt all NPR-A lease sales and ending — maybe — at the very end of 2008, the earliest BLM will be ready to hold another lease sale. Not October or November 2008, but the "very end of the year," a BLM official recently told Petroleum News.

In other words, the next lease sale will be held after the next presidential election. That's where the "maybe" comes in because the next administration

see **LIMBO** *page 18*

NPR-A regs expected in December 2008

The U.S. Bureau of Land Management expects to release its revised NPR-A oil and gas leasing and unitization regulations in December 2008, BLM Alaska District spokeswoman Sharon Wilson told Petroleum News Aug.23.

The public comment period on the proposed regulations for the National Petroleum Reserve-Alaska ended July 23, but due to the lengthy internal review process that follows,

see **REGS** *page 19*

GOVERNMENT

Canada's Northern shake-up

Prentice moves but retains control of Mac gas line; Handley to step down

By GARY PARK
For Petroleum News

A political changing-of-the-guard is sweeping through Canada's north, with a highly trusted federal cabinet minister leaving one key post but remaining the government's point man for the Mackenzie Gas Project, while Northwest Territories Premier Joe Handley is preparing to leave politics.

Northwest Territories Premier Joe Handley is preparing to leave politics

A juggling of the federal cabinet announced by Prime Minister Stephen Harper saw Jim Prentice transferred from the Indian Affairs and Northern Development portfolio to the Industry post.

However, Prentice's office said he will keep responsibility for overseeing the proposed Mackenzie Valley pipeline — a relief to northerners and the industry.

Two days later, Handley announced he will "seek new ways" to serve the NWT after the territories Oct. 1 election, ending a career that saw him elected to the legislative assembly in 1999 and become premier in 2003.

He will leave satisfied that the NWT has made strides towards its primary goal of "greater self-reliance through shared responsibility," but concedes that the most important piece of business remains unfinished — an agreement-in-principle with the federal government on "devolution and resource-revenue sharing."

see **SHAKE-UP** *page 17*

LAND & LEASING

Gulf sale draws $289.9M

Bidders go after Lower Tertiary prospects; Statoil leads in winning bids

By RAY TYSON
For Petroleum News

Norway's Statoil took no prisoners in Western Gulf of Mexico Lease Sale 204, accounting for seven of the highest single bids and nearly half of the entire $289.9 million in total winning bids submitted among companies participating in the Aug. 22 sale in New Orleans, La.

Lars Herbst, MMS acting director for the Gulf region

Sale 204, while drawing some huge bids, fell well short of the $341 million collected by Uncle Sam in last year's Western Gulf lease sale. Sale 200 also was the best Western Gulf showing in nine years for the number of bids submitted and the best performance in eight years for the amount of money bid.

In total, 282 bids were placed on 358 tracts in Sale 204, down from last year's 541 bids on 381 blocks. Only 47 companies participated compared to 62 companies last year.

However, considering the U.S. Minerals Management Service reduced the Western Gulf planning area by around 20 percent, due to a general boundary reconfiguration of the U.S Gulf's three planning areas, Sale 204 actually was a better sale than last year's, Lars Herbst, MMS

see **GULF SALE** *page 17*

contents

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

ON THE COVER

OIL PATCH INSIDER

EXPLORATION & PRODUCTION

FINANCE & ECONOMY

GOVERNMENT

LAND & LEASING

NATURAL GAS

WORKFORCE DEVELOPMENT

Alaska's Premier Oil and Gas Consultants

PRA
Petrotechnical Resources Alaska

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

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

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

Skills
- Project Management
- Geophysics
- Geology
- Petrophysics
- Engineering

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

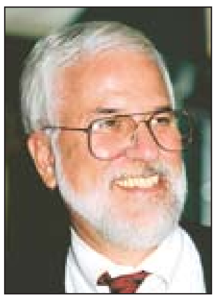
Data
- Digital Well Logs
- Well History
- Directional Surveys
- Formation Tops
- Seismic
- GIS

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

continued from page 1

INSIDER

five years and director for six years. In both capacities Boyd oversaw many aspects of the state's oil and gas business; spending a lot of time in Juneau providing legislative testimony and information to government agencies, the media and the public. He left the position in 2001 to become an oil and gas consultant.


KEN BOYD

Norsk Hydro's evaluation of Alaska is being run out of Hydro's headquarters in Oslo, Norway. The parent company Hydro, which until recently was called Norsk Hydro, is both a major oil and gas company and the third largest producer of aluminum in the world. On Oct. 1 it will merge with Norway's Statoil, another major oil and gas producer, to become Statoil Hydro. The combined company will be the world's largest offshore operator, followed in order by Royal Dutch-Shell, Petrobras, BP, ExxonMobil, Woodside Energy, Chevron, Total, Eni, Hess and ConocoPhillips.

The deal also will strengthen Statoil's position in the Norwegian Sea and the Norwegian sector of the Barents Sea, a frontier area and environmentally harsh deepwater region of the Arctic that carries high hope for large hydrocarbon deposits.

Hydro has the Norwegian continental shelf as its base, but also produces oil and gas in Angola, Canada, Russia and Libya, and participates in investments elsewhere in the world. Combined production of the two companies will be about 1.7 million barrels of oil per day with combined reserves of 6.3 billion barrels of equivalent, per late 2006 numbers.

The Norwegian State will hold about 62.5 percent of the merged entity.

Statoil said the merger was largely motivated by the two companies' mutual desire to expand outside Norway, where the competition for offshore acreage is intense amid high oil prices.

In 2004, Statoil acquired Hydro's 10 percent interest in Snohvit, the first major development in the Barents Sea offshore Norway, raising Statoil's interest in the gas field to 33.53 percent.

Statoil operates the massive Snohvit project in the Barents Sea, which is expected to produce about 706 million to 883 million cubic feet per day for shipment as liquefied natural gas.

In February, the Norwegian Petroleum Directorate announced that Hydro had made an oil and gas discovery at a new Arctic prospect in the Barents Sea off Norway's northern tip.

Norway is the world's third-largest oil exporter, after Saudi Arabia and Russia, and sees the Arctic Barents Sea it shares with Russia as a key new frontier for maintaining production as output from its more southern offshore fields decline.

The Snohvit field is due to come on stream in the same area in December as the first offshore field in the Barents Sea.

The Norwegian government has allowed drilling in parts of the Barents Sea under strict environmental controls due to the fragile cold weather ecology of the region.

—KAY CASHMAN

Arctic Energy Summit extends early bird deadline to Sept. 7

THE ARCTIC ENERGY SUMMIT'S TECHNOLOGY CONFERENCE, hosted by the U.S. State Department and set for Oct. 15-18 at the Egan Convention Center in Anchorage, has extended its early registration deadline from Sept. 1 to Sept. 7. Ben Ellis, managing director of Anchorage-based Institute of the North, said early registrants will receive a $100 discount off the $950 fee and can register online at www.arcticenergysummit.org.

At the four-day conference experts from Alaska, Russia, Canada, Iceland, Norway, Sweden, Denmark and Finland will discuss, debate and collaborate on energy challenges and opportunities in the Arctic.

An Arctic energy action team will be convened with the purpose of cooperatively developing an international vision and programmatic way forward on common problems related to the development of Arctic energy. Members of the team will likely include energy experts from the eight Arctic provinces, including producers, investors, consumers, landowners and governments, as well as experts in the fields of transportation, supply security and climate change.

An Arctic energy industry exhibition highlighting current energy technology will take place during the conference on the second and third days concurrent with the presentations of the technical papers.

Exhibitors will be able to register online at the Arctic energy Web site and find details regarding deadlines, booth size, and power requirements. The cost per standard booth is $950 or $1,100 for a premium location booth.

The exhibit hall will be in the Cook and LaPerouse Rooms on the main level of the convention center.

Web site of interest for NPR-A well, seismic data

EVER WANTED TO LOOK AT LEGACY SEISMIC or well data from the National Petroleum Reserve-Alaska? A mass of public-domain data is available on the U.S. Geological Survey Web site at http://nerslweb.cr.usgs.gov/.

In what USGS describes as one of its largest geological and geophysical datasets, the collection consists of data from two exploration programs conducted in the reserve. The first of these programs, conducted by the U.S. Navy between 1944 and 1953, when the reserve was called the Navy Petroleum Reserve No. 4, resulted in 36 wells and 45 core tests.

The second program, operated between 1974 and 1982 first by the navy and then by USGS, resulted in 12,000 line miles of seismic data and 28 wells.

Seismic material includes SEG-Y format data, and image files of documentation and maps. Well information includes location maps, well log data, images of well core slides and well reports.

—ALAN BAILEY

ENGINEERING EXCELLENCE

Complete Multi-Discipline
Engineering Services
& Project Management

Concept and Feasibility Studies
Project Scope and Development
Cost Estimating and Scheduling
Engineering and Detailed Design
Procurement Services
Field Engineering
Inspection and Quality Control
Environmental Engineering

Serving Alaska Industry
Since 1974

ALASKA ANVIL
INCORPORATED

509 W. 3rd Ave.
Anchorage, AK 99501-2237
(907) 276-2747
FAX: (907) 279-4088

50720 Kenai Spur Hwy.
Kenai, AK 99611
(907) 776-5870
FAX: (907) 776-5871

I want in!

Do you want your company's ad to appear in the next issue of Petroleum News?

Your ad can reach Alaska and northern Canada's oil & gas industry each week. It's just a phone call away! Call now for advertising rates and information.

Call Susan Crane at 907.770.5592

LAND & LEASING

Mental Health to offer 125,000 acres

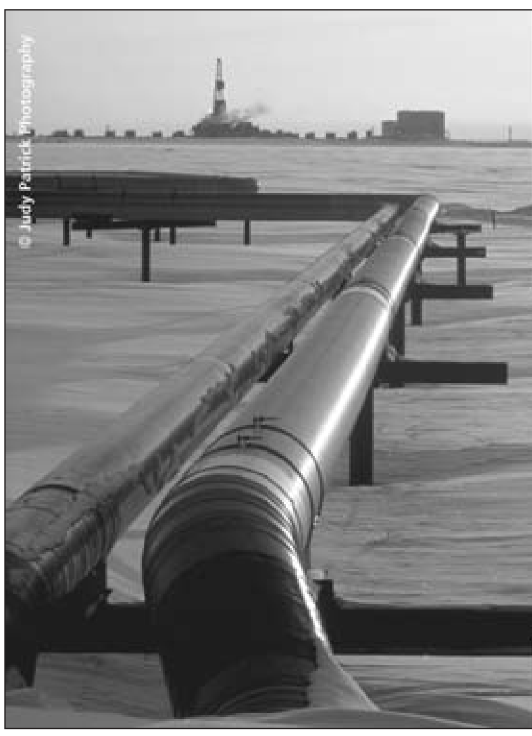
The Alaska Mental Health Trust Land Office has posted notice of an oil and gas lease sale for oil and gas exploration and development in the northern Cook Inlet basin. The Trust Land Office plans to offer some 125,000 acres with a bid opening Nov. 14 at the Trust Land Office in Anchorage.

The Trust Land Office plans to offer some 125,000 acres with a bid opening Nov. 14 at the Trust Land Office in Anchorage.

Twenty-four tracts are being offered. Details are available online at: www.mhtrustland.org/.

The Trust Land Office owns the right to lease or develop the coal, oil and gas rights to approximately 300,000 acres of land around Cook Inlet and on the Kenai Peninsula and has more than 100,000 acres under oil and gas lease in the Cook Inlet and Nenana basin regions and over 2,000 acres under coal lease in the Healy and Sutton areas.

—PETROLEUM NEWS



Premier
Pipe Insulation
and
Coatings
in Alaska.
FLOWLINE
ALASKA, INC.

●WORKFORCE DEVELOPMENT

DNR in a losing battle for talent

Department of Natural Resources' Kathy Sheehan-Dugan predicts serious problems for future project development if trend continues

By AMY SPITTLER
Petroleum News

The number of positions open in the Alaska Department for Natural Resources are too numerous to list, but Kathy Sheehan-Dugan says that virtually all job classes have vacancies. With a 27 percent annual turnover rate and approximately 900 employees, that's almost 250 positions a year.

The problem has intensified for Sheehan-Dugan, who recently took over as coordinator for DNR's Public Information Center and Workforce Planning/Career Development Program.

"Many of our highly technical positions are very difficult to fill and can remain vacant for many months, sometimes years," she says, acknowledging that the department is competing with a number of companies in the private sector for highly qualified professionals in specialized areas.

Positions needing to be filled at DNR currently include a forester, grants administrator, geologist, surveyor, natural resource specialists and managers, fire and resource technicians, habitat biologists, plus many others. Sheehan-Dugan emphasizes that "every day the advertised jobs change."

There's also a wide variety of support positions that get overlooked by potential candidates, not immediately recognized as natural resources jobs. Procurement positions, accountants, IT specialists, archaeologists, park rangers, economists, and food service jobs are all available.

With offices in 22 communities across the state, from Fairbanks to Ketchikan, DNR has both full-time and seasonal positions, and is always taking applications.

But unfortunately, those looking for a government job these days are few and far between.

"To be frank, it's rather frightening," Sheehan-Dugan says. According to the department's most recent estimates, state government is looking at a 45 percent retirement rate through 2011, and the new generation of employees is 15 percent smaller than the retiring generation.

Positions needing to be filled at DNR currently include a forester, grants administrator, geologist, surveyor, natural resource specialists and managers, fire and resource technicians, habitat biologists, plus many others.

"Almost all employers today are in competition for those people," she conceded.

Planning ahead, DNR is taking into consideration the increase in resource development projects either already in progress or in the planning stages. But it's barely able to keep up with its mission now. Sheehan-Dugan explains that "we're losing our experienced industry expertise and our institutional knowledge. It seems we lost a generation of people going into the natural resource and science fields — development or regulatory."

DNR employees are primarily very experienced and close to retirement, or relatively inexperienced, and few employees are ready to move up to replace the retirees.

Sheehan-Dugan offers one explanation for the change. "In the past, people employed by the state tended to remain with the state, and those employed by industry stayed with industry: The lines are much more blurred now. Many people move easily between the public and private sectors."

This has, overall, been a benefit to resource management. "However, neither DNR nor the resource development industry can afford for DNR to be the training ground for the industry and for the majority of our employees to be inexperienced," she explains.

see **TALENT** *page 9*

Petroleum news

www.PetroleumNews.com

Kay Cashman	PUBLISHER & EXECUTIVE EDITOR
Mary Mack	CHIEF FINANCIAL OFFICER
Kristen Nelson	EDITOR-IN-CHIEF
Susan Crane	ADVERTISING DIRECTOR
Amy Spittler	ASSOCIATE PUBLISHER
Heather Yates	OFFICE MGR./CIRC. BOOKKEEPER
Shane Lasley	CIRCULATION DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Tim Kikta	COPY EDITOR
Gary Park	CONTRIBUTING WRITER (CANADA)
Ray Tyson	CONTRIBUTING WRITER
Alan Bailey	STAFF WRITER
John Lasley	STAFF WRITER
Allen Baker	CONTRIBUTING WRITER
Rose Ragsdale	CONTRIBUTING WRITER
Sarah Hurst	CONTRIBUTING WRITER
Paula Easley	DIRECTORY PROFILES/SPOTLIGHTS
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Mapmakers Alaska	CARTOGRAPHY
Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Dee Cashman	CIRCULATION REPRESENTATIVE

ADDRESS
P.O. Box 231651
Anchorage, AK 99523-1651

EDITORIAL
Anchorage telephone
907.522.9469
Editorial Email
Anchorage
publisher@petroleumnews.com
Canada
farnorth@petroleumnews.com

BOOKKEEPING & CIRCULATION
907.522.9469
Circulation Email
circulation@petroleumnews.com

ADVERTISING
907.770.5592
Advertising Email
scrane@petroleumnews.com

CLASSIFIEDS
907.644.4444

FAX FOR ALL DEPARTMENTS
907.522.9583

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

OWNER: Petroleum Newspapers of Alaska LLC (PNA)
Petroleum News (ISSN 1544-3612) • Vol. 12, No. 34 • Week of August 26, 2007
Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518
(Please mail ALL correspondence to:
P.O. Box 231647 Anchorage, AK 99523-1647)
Subscription prices in U.S. — $78.00 for 1 year, $144.00 for 2 years, $209.00 for 3 years.
Canada / Mexico — $165.95 for 1 year, $323.95 for 2 years, $465.95 for 3 years.
Overseas (sent air mail) — $200.00 for 1 year, $380.00 for 2 years, $545.95 for 3 years.
"Periodicals postage paid at Anchorage, AK 99502-9986."
POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

CORRECTIONS

• In the article entitled "Court nixes drilling" in the Aug. 19 edition of Petroleum News we incorrectly stated that the Cross Island whale hunt in the Beaufort Sea involves hunting humpback whales. The hunt is for bowhead whales.

• In the Aug. 19 issue of Petroleum News an article titled "Arctic claims heat up" had an error in the distance between the Chukchi Sea and the Bering Strait. The Chukchi Sea is just north of the Bering Strait, not 9,600 miles north.

Alaska's Underwater Professionals...
"Where Safety is The First Step"
• Production platform and sub sea pipeline inspections and repairs.
• Deep water mooring system maintenance & installation.
• Offshore Oil & Gas exploration diving support.
907-563-9060

● EXPLORATION & PRODUCTION

BP to shut down Badami for recharge

Field has run since September 2005, although six months on, six months off planned; performance has been better than expected

By KRISTEN NELSON
Petroleum News

The Badami field will go offline temporarily this fall — probably in September — after some two years of continuous production.

The most easterly of North Slope developed fields, Badami has had a lot of downtime since BP Exploration (Alaska) brought it online in 1998.

Most recently Badami has been in production since September 2005, even though BP said in 2005 it planned to shut the field down every six months for six months of reservoir recharge when that restart began.

When BP initially brought Badami online it expected the field to reach a production level of 30,000-35,000 barrels per day from some 30 wells.

But initial results were disappointing.

Production began in August 1998 and by October of that year the field was producing only 4,000-5,000 bpd from seven wells, not the 10,000 bpd the company had expected at that stage.

BP said at the time that the issue was the reservoir.

Compartmentalized reservoir

Badami produces from the Brookian, a complex turbidite reservoir — and the first of its type to be produced on the North Slope. Before the field came online BP officials said it was one of the most challenging reservoirs the company had attempted anywhere, with the oil in compartmentalized channels.

Badami was shut in early in 1999 when production dropped to 2,500 bpd and there was a risk that the Badami pipeline would freeze. The pipeline transports oil back to a central North Slope connection with the Endicott pipeline. The field was put back into production in May 1999.

Production continued, but the Badami sands participating area — the area within the unit that is in production — was contracted in 2000 from 12,737 acres to 3,680 acres.

"Poor hydrocarbon communication and high gravity oil within the reservoir resulted in low production rates," the state said in commenting on BP's 2000 decision not to drill additional delineation wells.

BP said at that time it would "continue production as long as production rates and temperatures remain at safe and economic levels," but if production had to be shut in to protect the pipeline due to low production during low temperatures it would evaluate restarting the facilities.

The economic problem associated with low production caused a two-year shutdown starting in 2003. BP told the state at that time the 1,350 bpd production rate wasn't enough to offset the field's operating costs.

BP said in early 2003 that it would review the field's economics but was also open to a sale or use of the field's facilities to process and/or transport oil from nearby fields which were expected to come online, although none have yet done so.

Three-year test under way

In 2005 BP restarted Badami for what it said would be up to three years to test new recovery techniques. It told the state in mid-2005 that the high price of oil was a factor in the restart, as were new reservoir oil recovery methods designed specifically for Badami. BP said in 2005 that the reservoir could be a good "intermittent producer" but that there was the possibility it could become a good "continuous producer." BP told the state that changing oil economics would determine if short-term or long-term operations are possible at Badami.

The company anticipated that six months of production and six months of recharge would alternate over the three-year period.

BP told the state this June in an annual update of the Badami plan of development that production has been continuous at Badami since the restart on Sept. 17, 2005, with production at an annual average rate of 1,100 bpd.

This production period, BP said, was "significantly longer than the nominal six months" the company anticipated when it filed the current plan of development for the field.

The company said it had been able to maximize the field's production by focusing on depletion planning and reservoir management. This included close monitoring of well tests and gas-oil-ratio data.

The reservoir continued to decline, BP said, although frequent treatments to remove paraffin and asphaltenes helped maximize production. "These measures, combined with gas-lift optimization, contributed to the continuous production," the company said.

One well has been used for gas injection, with production from the other wells.

The latest production reports from the Alaska Oil and Gas Conservation Commission, for June, show production from four completions and gas injection from one completion.

Alternatives for test

BP told the state in 2005 that the Badami restart operations were part of a "production exploration program" which was expected to take a maximum of three years, "or even shorter if the oil reservoir production results are not satisfactory."

BP said it expected reservoir recovery to benefit from new recovery technologies. It told the state "there is a chance that it will become a good producer," probably a good "intermittent producer," with a chance the field could become a good "continuous producer."

BP told the state this June that the company was developing plans to temporarily shut-in the field, probably in September, because of production decline. The shut-in would allow the reservoir to recharge.

"Previous work confirmed the highly compartmented nature of the Badami reservoir in which reservoir pressure slowly recharges during periods of no off-take," BP said. Well pressure would be measured during the shut-in period "to monitor reservoir pressure recharge. The rate of reservoir recharge will be a key factor in determining the merit and timing of field restart." ●

LAND & LEASING

Shale gas bidding tops B.C. sale

The run on shale gas prospects in northeastern British Columbia continued unabated at the province's Aug. 15 land sale, with successful bids topping C$78 million for an area north of Fort Nelson.

Scott Land & Lease, acting as broker for unidentified bidders, led the way, acquiring 14 parcels for a combined C$39.16 million, including C$10.61 million for one 8,500-acre offering that averaged C$1,250 per acre.

The surging competition for shale gas rights was reflected in the rising per-acre price.

Scott Land made a top bid of C$915 per acre in March for a multi-section intersecting block and slightly less for an adjoining parcel, while Sekani Resources paid an average C$902 per acre for another adjoining parcel.

The shale gas rights represented more than half the total of C$149 million collected at the sale — easily the best result for 2007 — pushing the year-to-date tally to C$313.48 million, compared with C$427.82 million at the same time last year.

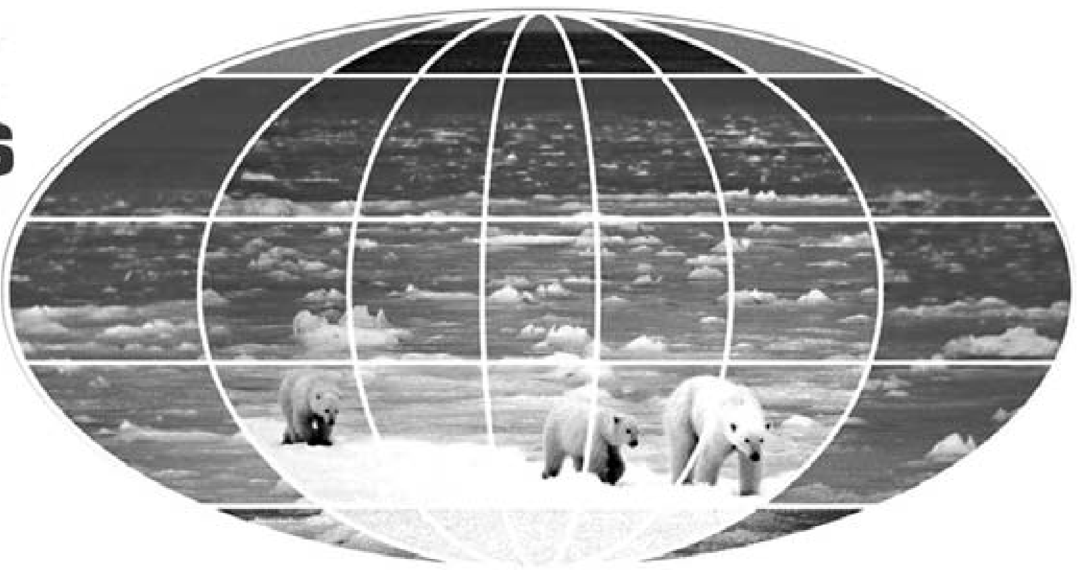
Interest in shale gas dominates the Sept. 12 sale, with postings in the Horn River basin and Cordova Embayment totaling 324,000 acres.

Leading operators in the Horn River area are EnCana, EOG Resources and Nexen.

—GARY PARK

TOTAL SAFETY
Breathing Air Systems - Gas Detection Systems
H2S & Safety Consultants - CPR/First Aid Training
Remote Emergency Medical Support
ALASKA DIVISION
ph: 907-743-9871 fax: 907-743-9872
www.totalsafety.com
Ensuring the safe Well-being of Workers Worldwide

CGGVERITAS
2450 Cinnabar Loop, Anchorage, Alaska 99507
(907) 276-6037 FAX (907) 276-6034



When your operations traverse more than 500 square miles of new tundra every winter, a sound environmental management system and quality people to implement it are the difference between success and failure.
CGGVeritas is the world's leading international pure-play geophysical company delivering a wide range of technologies, services and equipment through Sercel, to its broad base of customers mainly throughout the global oil and gas industry.

LAND & LEASING

Potential Alaska state and federal oil and gas lease sales

Agency	Sale and Area	Proposed Date
DNR	Beaufort Sea Areawide	Oct. 24, 2007
DNR	North Slope Areawide	Oct. 24, 2007
MHT	2007 Oil & Gas Sale	Nov. 14, 2007
MMS	Sale 193 Chukchi Sea	Feb. 6, 2008
DNR	Alaska Peninsula Areawide	Feb. 27, 2008
DNR	North Slope Foothills Areawide	Feb. 27, 2008
DNR	Cook Inlet Areawide	May 2008
DNR	Beaufort Sea Areawide	October 2008
DNR	North Slope Areawide	October 2008
BLM	NE NPR-A	To be determined
BLM	NW NPR-A	To be determined
DNR	Alaska Peninsula Areawide	February 2009
DNR	North Slope Foothills Areawide	February 2009
DNR	Cook Inlet Areawide	May 2009
DNR	Beaufort Sea Areawide	October 2009
DNR	North Slope Areawide	October 2009
MMS	Sale 209 Beaufort Sea	2009
MMS	Sale 211 Cook Inlet	2009
DNR	Alaska Peninsula Areawide	February 2010
DNR	North Slope Foothills Areawide	February 2010
DNR	Cook Inlet Areawide	May 2010
DNR	Beaufort Sea Areawide	October 2010
DNR	North Slope Areawide	October 2010
MMS	Sale 212 Chukchi Sea	2010
MMS	Sale 217 Beaufort Sea	2011
MMS	Sale 214 North Aleutian basin	2011
MMS	Sale 219 Cook Inlet	2011
MMS	Sale 221 Chukchi Sea	2012

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

This week's lease sale chart sponsored by:

PGS Onshore, Inc.

PGS

● GOVERNMENT

AOGCC: no change to Prudhoe rule 9

Commission won't consider new reporting; requires operator to demonstrate near-term oil recoveries through existing mechanisms

By KRISTEN NELSON
Petroleum News

The Alaska Oil and Gas Commission wrapped up its inquiry into amending rule 9 of the Prudhoe Bay oil pool conservation order in July with a determination that no change in rule 9 is necessary at this time.

Rule 9 was adopted in 1977 as part of the original Prudhoe Bay oil pool rules; it limits gas offtake from the Prudhoe Bay oil pool to 2.7 billion cubic feet a day.

In 2005, in the light of a probable North Slope gas pipeline project and sales of natural gas from Prudhoe Bay, the commission held hearings on revising the rule. Later that year the Prudhoe Bay working interest owners agreed to provide commission staff and a consultant with access to reservoir simulation and engineering studies to enable the commission to analyze the effects different gas offtake rates and gas sale startup dates would have on total hydrocarbon recovery from Prudhoe.

A confidential study was completed for the commission early this year by a reservoir engineering consultant and oral and written summaries of the study were presented at a public hearing in February.

The commission said the gas offtake study "found insufficient information on which to justify increasing the offtake rate" above the 2.7 bcf a day established in rule 9, "but concluded that an early, high rate gas sale could result in the loss of a substantial volume of hydrocarbons," although "even greater volumes could be lost if gas sales are too delayed."

June hearing on amending rule

The commission held a hearing in June to consider requiring operators to submit a depletion plan, a recommendation from the gas offtake study completed earlier in the year. The study recommended evaluation of gas offtake on total hydrocarbon recovery before gas sales and development of a hydrocarbon depletion plan.

There was industry opposition at the hearing to the proposed requirement for commission approval of a depletion plan prior to sales of any significant amount of natural gas from Prudhoe. Prudhoe Bay operator BP, speaking for the working interest owners, told the commission BP operates Prudhoe Bay under commission pool rules and development plans approved by the Alaska Department of Natural Resources and does not see a need for an amendment to the existing rule before a significant gas offtake occurs. (See "State wants gas say-so" in June 24 issue of Petroleum News.)

No amendment 'at this time'

The commission said July 10 that based on the gas offtake study and multiple hearings on rule 9 it "has decided — at this time — not to amend the rule to require a commission-approved hydrocarbon depletion plan prior to a gas sale."

The commission said it made the decision based on the fact that any gas sale was years away and even in the absence of such a plan, the statutes under which the commission operates prohibit waste of oil and gas.

The commission said it receives depletion plan-related information in the annual surveillance report from the working interest owners, the annual plan of development required by DNR and the annual field overview presentation required by DNR.

When an amendment is sought to increase the offtake rate rule 9 can be amended to include a depletion plan requirement, the commission said. ●

SUBSCRIBE
to Petroleum News

Don't miss another issue, call: **907 522.9469**

NATURAL GAS

FERC: Limited impact from Oregon LNG

A federal agency says a proposed liquefied natural gas project near the mouth of the Columbia River would have "limited significant environmental impacts," and the company should take 98 additional measures to offset them.

The assessment comes from the Federal Energy Regulatory Commission in a draft environmental impact statement released Aug. 17 for the Bradwood Landing facility 20 miles upstream of Astoria.

The 600-page document is part of the analysis required before the commission could authorize a terminal.

Bradwood Landing is proposed by NorthernStar Natural Gas Co., one of five companies pursuing LNG projects in Oregon and the farthest along in the federal approval process.

—THE ASSOCIATED PRESS

Get Fast, Accurate Results
With Bell's unrivaled surveying expertise.

Call us today and take advantage of:

State-of-the-art surveying technology (conventional, GPS & 3D scanning)
Quick, accurate results
Cost-effective solutions
Professional contacts on slope & throughout Alaska
Experienced crews
Strong safety culture
Over 30 years surveying experience

907.274.5257
907.277.3800
www.frobertbell.com

engineers surveyors bell

New Storage Facility — Dimond Blvd. Location

334-9440
8700 King St., Anchorage

King St. Toys R Us Costco C St. Dimond Blvd.

888-241-5464
Fax: 907-334-9441

24 HOUR SECURITY • RV & BOAT STORAGE
HEATED UNITS 5x5 TO 10x30 • FENCED & LIT
PACKING SUPPLIES • 7 DAY ACCESS
SECURITY ALARM IN EACH UNIT

King Street STORAGE

www.kingstreetstorage.net

● EXPLORATION & PRODUCTION

Feasting on Canada

Abu Dhabi's TAQA swallows Pioneer assets for $540 million as part of $3 billion expansion plan, adding 10,000 boe per day

By GARY PARK
For Petroleum News

Canada has leapt to the top of the shopping list for Abu Dhabi National Energy Co. (better known as TAQA).

Having already locked up its acquisition of Northrock Resources from Pogo Producing earlier this year it disclosed on Aug. 22 a cash deal to buy the Canadian unit of Pioneer Natural Resources.

That came less than a week after TAQA executives set a goal of tripling Canadian production over the next 12 to 15 months to 100,000 barrels of oil equivalent per day and hiking reserves to 500 million boe from the Northrock base of 142 million boe.

Pioneer's holdings will push TAQA another 10,000 boe per day and 59 million boe of reserves down that road, while giving TAQA expertise in coalbed methane exploration and production in Alberta.

Peter Barker-Homek, chief executive officer of TAQA, said the Pioneer business is a "great addition" to his company's operations in Canada.

It provides "further scale and efficiencies to our existing business by adding 27 percent to daily production, increasing 2P (proved plus probable) reserves by 35 percent and providing a reserve life index in excess of 17 years," he said.

Scott Sheffield, Pioneer's chairman and chief executive officer, said the sale will allow his company to "effectively redeploy capital and enhance our financial flexibility," with the proceeds going to share repurchases, debt reduction and possibly "bolt-on acquisitions in existing operating areas."

The first Middle Eastern country to set up a base in Canada, TAQA offered some of the most upbeat comments heard in a long time about Canada's energy outlook.

Barker-Homek said that despite high production costs, Canada offers political stability and access to U.S. markets. TAQA seeks to balance political and fiscal stability, rather than being swayed by costs alone, he said, adding Canada "may have less bottom line benefit per barrel, but you have a more reliable bottom line benefit per barrel."

Assets are also easier to purchase in Canada than the United States, where TAQA would like to invest but finds itself stymied by tight rules on foreign-based takeover, he said.

"We see Canada as a core market for investments and have decided to focus on big assets," Barker-Homek said.

Makes one purchase for every 100 deals

He said TAQA is "value driven and opportunity driven," while applying extremely rigorous investment criteria.

For every 100 deals it examines, 10 are appraised, three enter negotiations and only one is bought, he said, noting that TAQA has walked away from $15 billion in prospective deals this year alone.

Barker-Homek openly conceded that his company may have entered Canada "at the right time for a lot of consolidation," as the Canadian government's decision to start taxing trusts at the same rate as corporations in 2011 sets the stage for deal-making.

Dave Pearce, chief executive officer of TAQA North, the renamed Northrock, said the hunt for acquisitions is concentrated in the Western Canada Sedimentary basin — which sprawls across much of British Columbia, Alberta, Saskatchewan and the Northwest Territories, where the assets fetch an average $45,000 per flowing barrel.

Current pressures resulting from weakened natural gas prices and the related difficulties for some producers suggest there may be "quite a lot of opportunities," he said. "There are organizations that are tapped out and have desirable assets — gas and to a lesser extent oil — on the conventional side," Pearce said.

Although TAQA North is geared for a "relatively healthy" upstream budget in 2008, it will de-emphasize exploration and production "for the time being in favor of acquisitions," he said.

In case anyone was inclined to question TAQA's motives and the level of its commitment in Canada, Barker-Homek said the objective is to become one of the country's top energy producers, and to build a company focused on sustainable growth and discipline that will last for 100 years.

But the Alberta oil sands are not currently in TAQA's focus.

"There is a big debate about the environmental impact of the oil sands," he said. "We will monitor that and see how that market develops," confident that technology will improve project economics for the resource.

"At this point we are interested in the level of (oil sands) technology relative to delivering product in an environmentally sensitive way," he said.

For now, TAQA is bullish on the conventional oil and gas plays in Canada, which is "an area we have the greatest confidence in and I would see us aggressively developing in those areas," Barker-Homek said.

He said TAQA is "keenly interested" in the technology being deployed in recovering an estimated 50 trillion cubic feet of coalbed methane in Canada. It is also prepared to use its power generation expertise if Canada shifts from coal-fired to gas-fired generation and is ready to participate in greenfield power projects, the conversion of existing coal-fired plants to alternate fuels, natural gas storage, LNG regasification, ethanol and wind power, he said.

TAQA was created in 2005 and is a publicly traded company, although it is 75 percent owned by the Abu Dhabi government, which controls more than 90 percent of the oil reserves in the United Arab Emirates.

It has assets valued at $16 billion in the Persian Gulf, Middle East, Europe, Asia, Africa and North America and hopes to attain $40 billion to $60 billion by 2012, Barker-Homek said. ●

EXPLORATION & PRODUCTION

Rowan rigging up at Cosmopolitan

Rowan Rig 68 has arrived at Pioneer Natural Resources' Cosmopolitan drilling site on Alaska's Kenai Peninsula and is preparing for drilling, Tadd Owens, director of government and public affairs for Pioneer in Alaska, told Petroleum News on Aug. 16.

"It's currently being rigged up on-site at Cosmopolitan," Owens said.

Cosmopolitan, which is approximately two miles offshore, near Anchor Point on the lower Kenai Peninsula, includes state and federal leases totaling some 25,000 acres. The prospect has resource potential of 30 million to 100 million barrels of oil, Pioneer Natural Resources Alaska President Ken Sheffield told an audience at the South Central Alaska Energy Forum in September 2006.

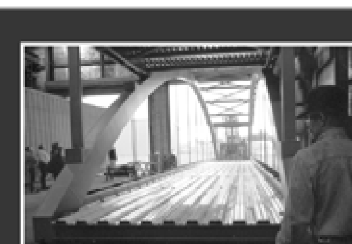
The known oil accumulation was discovered by Pennzoil in 1967 in the 12,112-foot vertical, Starichkof State No. 1, drilled from a jack-up rig. The more recent appraisal of the prospect has involved directional drilling from shore — in 2003 ConocoPhillips and the other owners at that time drilled a long-reach appraisal well and a sidetrack, the Hansen No. 1 and Hansen No. 1A wells.

It appears from Pioneer's plan of exploration and a drilling permit issued by the Alaska Oil and Gas Conservation Commission that Pioneer will use the Rowan rig to drill a sidetrack well Hansen 1A L1.

—ALAN BAILEY

ENSR | AECOM
A trusted environmental partner in Alaska & worldwide
• Consulting • Engineering • Remediation
907.561.5700 / 800.478.4307 www.ensr.aecom.com

Computing alternatives
INFORMATION TECHNOLOGY CONSULTANTS
We offer the following solutions to Public and Private sectors
• Client Server Systems
• Web Applications
• Revenue Taxation Systems
• Oil & Gas Systems Leasing/Royalty/ePermitting
Ph| 907-644-4522
Fx| 907-644-4523
services@computing-alt.com
www.computing-alt.com
519 W 8th Avenue, Suite 205
Anchorage, AK 99501

STEELFAB
ALASKA'S STEEL SOURCE
Phone: 907-276-4303 Toll Free: 1-800-845-4303 FAX: 907-276-3448
2132 Railroad Avenue Anchorage, Alaska 99501



● NATURAL GAS

Permitting for Mat-Su CBM in progress

Public hearing scheduled for borough permit for Fowler Oil and Gas coalbed methane prospect; drilling planned for the spring

By ALAN BAILEY
Petroleum News

The old adage of the devil being in the details seems applicable to any oil and gas development project. And Fowler Oil and Gas (Alaska)'s proposal to drill for coalbed methane in farmland between Palmer and Wasilla in Alaska's Matanuska-Susitna Borough is no exception to that rule.

The company has been identifying all of the issues relating to its planned well at the Kircher unit at the corner of Bogard Road and Trunk Road, Arlen Ehm, president of Fowler Oil and Gas (Alaska), told Petroleum News Aug. 22.


ARLEN EHM

"I want to avoid future problems," Ehm said.

The company is particularly anxious to communicate with Mat-Su Borough residents, to resolve any local concerns — a previous attempt to develop coalbed methane in the borough collapsed amid acrimonious arguments between the would-be developer, the local residents, the borough and the state about land access and potential pollution.

Borough permit

Following that previous debacle, the borough introduced regulations for coalbed methane development. Fowler Oil and Gas has applied for a conditional use permit under those regulations — the borough has scheduled a public hearing on Oct. 1 for the permit application, with a possible carry-over hearing on Oct. 15.

"We've met all the (regulatory) requirements of the borough but people are asking questions," Ehm said.

The company is also moving ahead with permit applications with the Alaska Department of Environmental Conservation, the Alaska Department of Natural Resources and the U.S. Army Corps of Engineers. And as an essential prelude to some of the permitting the company is conducting a land survey at the proposed drilling site.

> *"We're not the first ones to use these lateral wells. There are thousands of (coalbed methane) wells in the Lower 48 that use them."*
> **—Arlen Ehm, president, Fowler Oil and Gas (Alaska)**

Given the permitting timeframe, it is unlikely that drilling could start before November. And, because the company does not wish to incur the complications of starting a new well in the middle of the winter, drilling will not now begin until the spring.

"I didn't want to go out there and rig up, spud in the coldest and darkest months of the year," Ehm said. "You pay at least 150 percent when you try to push something through in the middle of the winter."

But the company does plan to move equipment into a barn at the site during the winter. That will avoid having to try to truck in heavy equipment during spring break-up, when road load limits are reduced, Ehm said.

Horizontal drilling

One key element in Fowler Oil and Gas' approach to coalbed methane development is the use of horizontal drilling technology. The drilling contractor will drill a single vertical well to a depth of about 3,500 feet. Perforated horizontal wells sidetracked from that central well will then thread out through each coal seam penetrated by the vertical well.

The horizontal drilling technique will enable access to thousands of horizontal feet of coal seam from a single surface wellhead, thus eliminating the need for the profusion of surface wellheads that has blighted some coalbed methane developments, while enabling adequate production rates from a single well.

Patented technology will eliminate the water disposal problems that have often plagued coalbed methane production in the past, Bob Fowler, CEO of Fowler Oil and Gas, told Petroleum News in May. A downhole electric submersible pump will draw water drained from the coal into the bottom part of the vertical well, to dispose of the water into relatively deep sandstone formations, below the level of the coal. Thus, no produced water will reach the surface or enter the water table.

During drilling operations, Fowler Oil and Gas plans to use hospital mufflers to reduce noise from the drill rig, Ehm said. And once the well goes into production, the wellhead equipment will be hidden inside a small barn-like enclosure. Gas production will not require the use of compressors, so that there will be no compressor noise.

No state CBM regulations

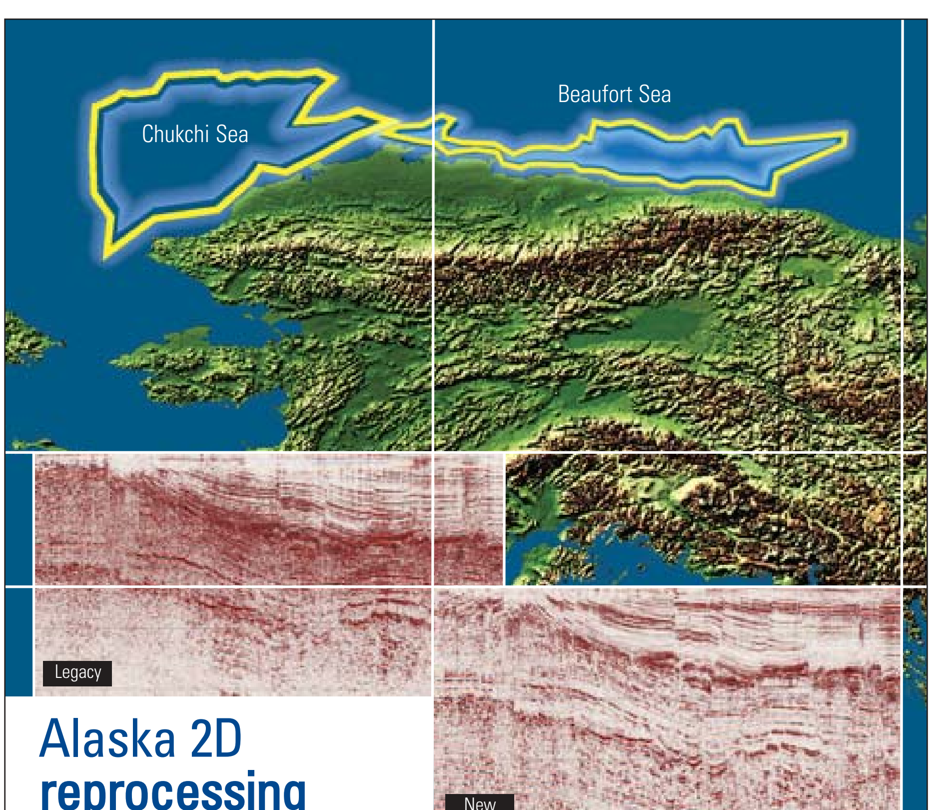
One issue that Fowler Oil and Gas has encountered with its proposed drilling scheme is the lack of state regulations for coalbed methane development. For example, current regulations for natural gas wells assume the development of conventional gas, with one well in a 640-acre area, Ehm said. But a single coalbed methane well will only drain a radius of 300 feet, he said.

Another regulatory issue is an Alaska Oil and Gas Conservation Commission requirement to measure the amount of water that is injected underground. Making that type of measurement would require produced water to be brought to the surface, thus defeating the underground water disposal arrangement in the well and introducing risks of water spillage.

"We don't want to bring it to the surface," Ehm said. "We want to leave it down there."

Ehm thinks that Alaska could adopt existing coalbed

see CBM page 9



Alaska 2D reprocessing

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

- Phase and amplitude match by survey vintage
- Improved noise attenuation
- Improved signal pre-processing
- Full isotropic curved ray Kirchhoff prestack time migration
- True amplitude (AVO compatible)

Beaufort Sea and Chukchi Sea data available now.

For more information contact 713-689-1000

www.westerngeco.com

WesternGeco

© 2007 Schlumberger

Alaskan Owned.
Alaskan Operated.
Great people providing quality services.

ASRC Energy Services, Inc. has been providing reliable oil and gas services in Alaska for more than 20 years.

Regulatory and Technical Services • Exploration, Drilling Support, and Geosciences • Project Management • Engineering • Fabrication • Construction • Pipeline Construction • Operations and Maintenance

ASRC Energy Services
a subsidiary of Arctic Slope Regional Corporation

www.asrcenergy.com

continued from page 4

TALENT

Like many employers, Sheehan-Dugan is wary of large projects on the horizon. The mining, oil and gas industries have also recognized that a shortage of employees for the state, in particular DNR, adds a new spin on the planning for future projects.

"They're just as interested as we are in seeing the department fully staffed with trained and experienced people," she says. "The Alaska Miners' Association recently wrote to the governor expressing their concern with DNR's inability to fulfill its missions." Echoing Sheehan-Dugan's message, the letter went on to say that the problem "is keenly felt in DNR's professional positions, such as geologists and engineers, and will only get worse when a gas pipeline contract is finalized and private-sector workforce demands increase." Sheehan-Dugan is extremely satisfied to finally be on the same page as industry.

How DNR is tackling the problem

"The state's making an effort to get more young people interested in resource fields," Sheehan-Dugan assures. She mentions the PARW group, Putting Alaska's Resources to Work, and commends them for recognizing that while there's plenty of opportunity in the resource industry there aren't enough people entering the fields. Other programs such as the Alaska Native Science & Engineering Program are working on getting more Native students interested in science and engineering careers.

"Industry, including DNR, is aware that it needs to market itself more effectively to young people, and there will be more effort made to make younger people aware of the possibilities," she says.

And the possibilities, according to Sheehan-Dugan, are numerous. "The resources are available to find positions." She reasons that, if anything, "the options could be too overwhelming for someone making decisions about college or a career change."

Employers across the state seem to agree that there are a limited number of people in the private resource industry to develop future projects. And Sheehan-Dugan confirms that there aren't enough people working in the public sector to review the studies or permits.

For anyone already in the workforce, Sheehan-Dugan asks that they don't bypass DNR because their degree isn't in natural resources. A candidate may have many other skills that will apply to the work DNR does, and all experience is valued.

To attract the next generation the department is beefing up its intern opportunities; from high school students to PhD candidates. High school students have the opportunity to learn soft skills and get an introduction to the variety of work the department does. Geology PhD candidates can work for the Division of Geological and Geophysical Survey in Fairbanks. In between, there are numerous options depending on a student's interest and skill level.

"We've had tremendous success with our interns in that they've had good learning experiences and we've gained a number of full-time employees as a result," says Sheehan-Dugan. Mark Myers, now the director of the U.S. Geological Survey, and formerly DNR's director of the Division of Oil and Gas and a state geologist, was once an intern for DNR's DGGS.

Perhaps the most lucrative benefit from providing internships is that it introduces the Department to people who have a genuine interest, or daresay a passion, for public service. Sheehan-Dugan admits that "they're a special breed."

But occasionally reality gets in the way, and even though wages are generally not the overriding factor that brings a person into public service or keeps them there, it has become an increasingly important factor. She understands that "public employees are no different than anyone else; they need to meet their financial and family obligations and need to have a job that enables them to do so." So regardless of their career preferences, DNR loses people routinely to better paying jobs elsewhere.

Everyone's futures may be at stake

Employers across the state seem to agree that there are a limited number of people in the private resource industry to develop future projects. And Sheehan-Dugan confirms that there aren't enough people working in the public sector to review the studies or permits. If the current differentials between public and private sector wages and benefits aren't addressed, many more people from DNR will leave for private industry.

"As we wait and hope for a gas pipeline contract, keep in mind that without DNR and other resource agency employees trained and in place, that project, and others, can't move forward," warns Sheehan-Dugan. She also hopes that as resource development industries recognize the value of experienced DNR employees, so will others in the private sector.

"To the degree private sector businesses expect their potential economic growth to increase as a result of a gas pipeline they should recognize that growth is tied to a functional state agency able to meet its mission in a timely manner," she adds.

In this state a strong economy means industries are meeting the demands to maintain a healthy environment. And in the words of the Department, its mission includes permitting development projects in a manner that maintains the integrity of the land for Alaskans now and in the future.●

continued from page 8

CBM

methane regulations from another state.

"We're not the first ones to use these lateral wells," Ehm said. "There are thousands of (coalbed methane) wells in the Lower 48 that use them."

Private land

The Kircher unit is in homestead land where the landowner owns both the surface and subsurface rights.

"We're drilling only on acreage owned by the people that own the surface," Ehm said.

But the mix of rural, urban, farming and forest land in the neighborhood of the drilling site does present some challenges in permitting the well, planning the project and gaining local support.

For example, Ehm is anxious to allay possible fears about any impact on local water wells from the Fowler Oil and Gas operations. The project will not require particularly large amounts of water and any water use has to be permitted by the Alaska Department of Natural Resource — DNR protects people's water rights, Ehm said.

"They tell us how much water we can take," he said.

And among the pesky details that the company needs to resolve are permitting of any modifications to the driveway into the drill-site property, and ensuring that the plans for road access and the power supply can accommodate a pending re-alignment of Trunk Road.●

Arctic Energy Technology Conference

Egan Civic Convention Center
15-18 October 2007
Anchorage Alaska

Attend an International Polar Year endorsed project designed to bring focus to extractive energy development, renewable and rural energy, and environmental, socio-economic and sustainability issues occurring throughout the Arctic.

Conference will include:
- presentations of technical papers on significant research
- panel discussions on major areas of concern
- a poster session of new technology
- industry exposition of products and services

For more information visit www.arcticenergysummit.org or contact Phil Cutler at (907) 771-2444.

Register now.

EXPLORATION & PRODUCTION

Frozen byways offer vanishing footprint

Use of ice-based infrastructure minimizes impact of winter exploration activity on environmentally sensitive North Slope

By ROSE RAGSDALE
For Petroleum News

Ice roads, winter byways that disappear with breakup in spring, are efficient and indispensable aids to oil and gas exploration on the North Slope. These ribbons of frozen water have paved the way for explorers to venture into remote areas of the Arctic since the 1950s when the Royal Canadian Mounted Police first fashioned crude roadways out of snow.

In Alaska, ice roads have successfully served remote locations in the Arctic, even during winters characterized by minus 70 degree Fahrenheit temperatures, 20-foot snowdrifts and limited daylight.

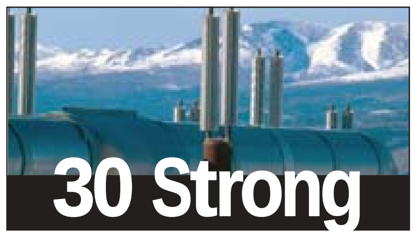
Early road construction in the 1920s featured bulldozing the tundra, but the practice proved disastrous. After just one season, such a route was impassable when the permafrost thawed.

Pioneer explorers turned to gravel to insulate the permafrost and stabilize roadbeds, airstrips, and drilling pads, but soon found that gravel mining and construction are expensive and environmentally harsh.

Oil and gas explorers quickly realized that ice roads could get the job done without leaving behind harsh reminders of their passage, and they cost a fraction of their gravel counterparts.

As construction of the trans-Alaska oil pipeline drew to a close in the 1970s, winter exploration roads made of snow and ice gained popularity on the North Slope.

Ice roads enabled explorers to use the same equipment to conduct exploration development programs that they used on gravel year-round, while minimizing the impact of their presence in the Arctic environment.



June 20, 2007, marked the 30th anniversary of the first barrels of North Slope crude flowing down the 800-mile trans-Alaska oil pipeline from Prudhoe Bay to Valdez. Looking back, it is clear that the role of technology has been paramount in the progress operators and contractors have made in improving the efficiency and lessening the impact of their operations on the Arctic environment. In a series of seven articles, Petroleum News will report on some of the technologies developed by the dedicated and innovative men and women who work on the North Slope. These articles will be followed by "30 Strong," a full color magazine celebrating three decades of North Slope oil production.

Rough riding on early roads

But in the 30 years since the late 1970s, ice road and ice pad construction technology has come a long way. Thanks to the growing expertise of operators and contractors, ice road construction evolved from simply packing snow into crude pathways across the tundra to mixing ice, water and snow into surprisingly durable thoroughfares that can withstand the heaviest loads all winter long.


JUDY PATRICK

Delineators mark the sides of ice roads to keep traffic from straying onto the tundra.

Early ice road builders just packed snow and basically drove on it.

The "ice" road was very rough, built with caterpillars and trucks, according to James Trantham, a project manager for ARCO Alaska Inc.

"Basically any time a truck went over it, you had to go back and roll over it again, because it just kind of 'squooshed' the snow up," Trantham told participants in an oil and gas technologies conference in 2000.

"So it was really high maintenance and probably not as safe a road as we have today," he added

The original North Slope ice road crews consisted of a couple of bed trucks with "suck-on" water tanks (tanks that had water pumps combined with the tank, that could be used for filling the tanks with water), a loader or grader and a dozer, according to contractors at Peak Oilfield Services Inc.

"The technique was to take snow on the road route, smooth it down with either a dozer, or a loader with a drag or a grader and then to put water on it. This produced a road that a rig could be moved across, but

see ICE ROADS page 11

Alaska Medallion Association Member • CAMTS Approved • DOD Approved
Search and Rescue • Exploration • Construction • Seismic • Mining

EVERGREEN HELICOPTERS OF ALASKA
Alaska Office: 1936 Merrill Field Drive • Anchorage, Alaska 99501 • Phone: 907.257.1500
Corporate Office: 3650 Three Mile Lane • McMinnville, Oregon 97128 • Phone: 503.472.9361
Fax: 907.279.6818 • Toll Free: 800.958.2454 • info@evergreenak.com • www.evergreenhelicopters.com

continued from page 10

ICE ROADS

were not necessarily very wide or smooth. The average crew was between 14 and 16 people, half on days and half on nights," they said.

The soils of the North Slope have a permafrost layer that is frozen from a depth of about 1,600 feet to up to maybe a foot below the surface. The top portion of the permafrost is called the active layer, and it thaws in the summer and refreezes in the winter. When snow is dumped on top of the active layer, heat is trapped in the top half-foot or so below the tundra.

"So by packing the snow, you remove the air and actually promote the freezing. We do that from a rolligon, and then in time the trucks come down the middle of the road and squirt water out to the sides and start moving around on the ice road," Trantham said.

JUDY PATRICK

Operators spray water onto the roadway surface to compact snow and build up the thickness of ice roads.

Regulators set guidelines

"In the 1970s, it was pretty evident to everyone that the slope was a very sensitive area, and there were plenty of examples of tundra damage throughout the slope," said Leon Lynch, a specialist with the Alaska Department of Natural Resources Division of Mining Land and Water.

DNR responded by passing regulations giving the slope a special land use designation. As a result, activities such as off road travel that were generally allowed on other state lands require a permit on the North Slope.

Among stipulations of the permits:

• Ice roads and ice pads must be built so that they are thick enough to protect the vegetative mat;

• Vehicles must be operated so that there will be no damage to the vegetative mat;

• All rehabilitation must satisfy the DNR commissioner; and

• DNR or another applicable land manager must determine what travel openings and closures should be based on snow cover and frost depth.

In the 1970s and 1980s, ice road builders started adding more water, especially close to the drill pads because there was so much traffic around the pads.

Later, they began to add more water to the roads, and use graders and snow blowers to maintain the ice roads.

"In the mid-80s, we actually started adding ice chips using a machine with a big pump that threw water up into the air where it turned into snow or ice chips (in the subzero temperatures of the 24-hour Arctic nights) and deposited on the road or pad where we would pack it down," Trantham said. "After awhile we started actually mining ice chips from lakes to use in ice road construction."

At the same time, the first insulated pads were built at the Leffingwell where insulation and boards were placed on the tundra to support the rig, he recalled. Later, the insulated foam was moved over to the KIC No. 1 well within the Arctic National Wildlife Refuge, he said.

The addition of delineators in the 1980s to mark the sides of ice roads also lessened the environmental impact of exploration on the tundra. Delineators allow exploration and construction crews to continue working in all but the very worst visibility, and they help to keep traffic on the ice roads.

Regulation drives ingenuity

As regulations governing the construction of ice roads and ice pads became more stringent, operators and contractors have responded, using technology to extend the length of the drilling season and to minimize damage to the tundra.

Regulators monitor the condition of the tundra closely and over the years have shortened drilling seasons as warmer weather has shortened North Slope winters.

The standard that regulators use for opening the tundra is 12 inches of frost and six inches of snow. Opening dates in general allowed for a six-month winter drilling season, but in the last decade, warmer temperatures have shortened the exploration season to about three and a half months.

Explorers responded with proposals for pre-packing trails and developing a graduated system of season opening. With such a system, instead of waiting for 12 inches of frost, lighter weight vehicles with lower ground pressure could actually operate on six or eight inches of frost. That became important for loaders and smaller vehicles used in ice road construction.

Working with regulators, operators and contractors refined this system until much of ice road construction occurs prior to the general tundra opening. This means that the sooner the industry gets to work safely, without damage to the tundra, the sooner they can complete their projects, and get off the tundra in spring, before breakup becomes a concern, DNR officials say.

Ice-based technology proves its metal

"The construction and use of ice roads by the petroleum industry provided access into environmentally sensitive areas without permanent impact from gravel road construction," said Scott Guyer, a researcher with the Bureau of Land Management in Anchorage.

Based on a study of ice roads and ice pads construction, including work done in 2001 and 2002 for the Puviaq exploration well, in the northeastern corner of the National Petroleum Reserve-Alaska, BLM concluded in 2003 that "ice roads and pads that support drilling operations, if built with care, can have no long-term effects to the fragile tundra environment," according to Guyer.

Today, ice road construction is similar to gravel road construction in many ways, only it is done with snow or ice. Dozers and drags pulled behind loaders are no longer used because they damage the tundra. Graders and loaders combined with on- and off-road water trucks and haul trucks are used to build the roads. Both water and snow are hauled from lakes to where roads are being constructed. Average crews number 24 to 32 people, depending on the scale of the project, again with half on days and half on nights.

To get an early start, operators and contractors use rolligons — large vehicles with large, smooth, low pressure tires that have a roller drive rather than a direct drive — which regulators have approved for travel on the tundra in both summer and winter. The rolligons are used to pack down the snow and place a layer of water on top of the tundra.

Technology spurs more improvements

On remote projects, where ice roads cannot link explorers with the gravel road system, all of the ice road equipment as well as drill rigs and support equipment must be hauled to the drill site. Originally Cat trains were used, but the practice was discontinued in the 1970s because of their detrimental effect on the tundra. Rolligons or track vehicles with balloon-like rubber tracks are now used to haul most loads across the tundra.

Early researchers would test the delicate touch of the rolligons by lying down on the tundra and allowing operators to drive the huge vehicles over their bodies.

Recently, rolligon crews have demonstrated even greater environmental awareness by carefully monitoring their activities on the tundra and taking steps to remove all signs of their passage, according to Sharmon Stambaugh, wastewater program manager for the Alaska Department of Environmental Conservation.

Peak, for example, has focused on rigorous vehicle maintenance to prevent spills of hydraulic fluids and other substances on the tundra. ●

WHAT'S THE BIG ATTRACTION?

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

To advertise in Petroleum News call Susan Crane, advertising director, at 907-770-5592. To subscribe visit PetroleumNews.com, call 907-522-9469, or email:

circulation@PetroleumNews.com

NATURAL GAS

Roller-coaster ride for Canadian gas

Ziff Energy suggests producers shut in wells rather than continue storage injections; lower service costs yet to bolster activities

By GARY PARK
For Petroleum News

From the staggering heights of two winters ago, the Canadian natural gas industry has descended into one of the most stomach-churning periods in its history.

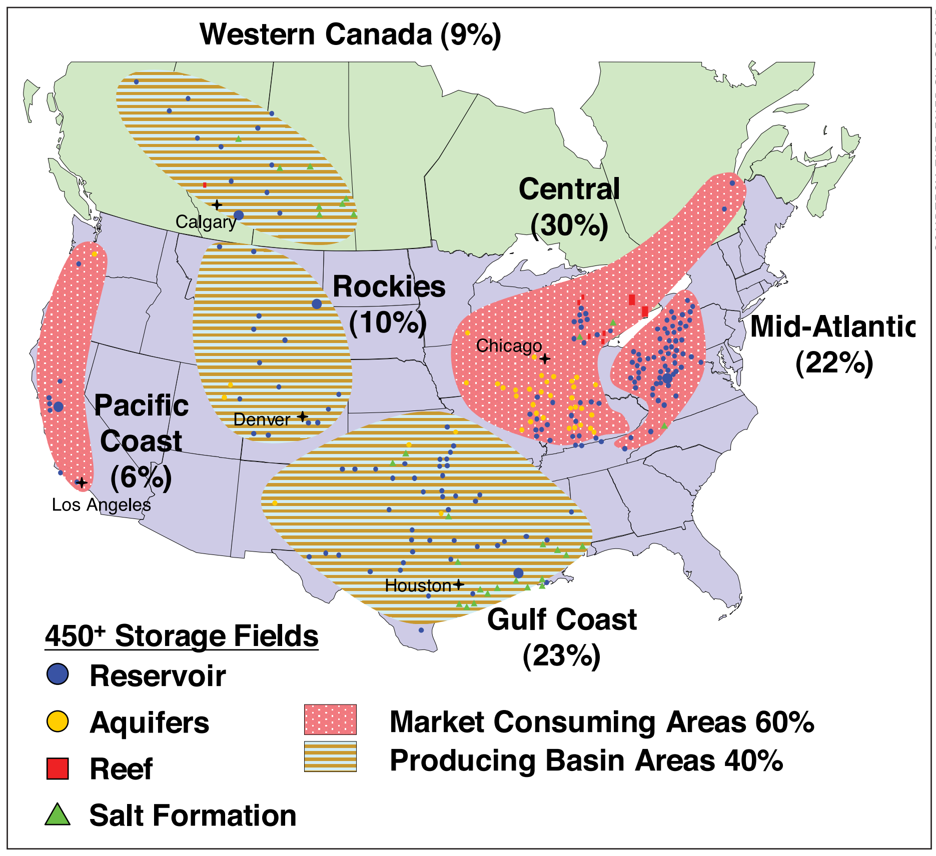
As quickly as a glimmer of hope surfaces — service costs are down 10-20 percent from a year ago, while heat waves and the prospect of a punishing hurricane season point to a surge in demand for Western Canadian gas — the sector gets knocked for a loop.

Things are so grim that Ziff Energy Group, a leading gas consultant, suggested North American producers should shut in wells rather than bolstering gas in storage once it reaches 3.3 trillion to 3.5 trillion cubic feet.

A Ziff study, based on its estimate of total storage capacity of 4 tcf, found that average annual injections run to 2.2 tcf and withdrawals are about 2.4 tcf.

An analysis of storage numbers since 1998 showed storage inventories at the end of the withdrawal season have ranged from 700 billion cubic feet to 1.19 tcf for an average 1.3 tcf, which means surpluses for even normal winters.

Ziff said increasing storage capacity would only aggravate the problems, although it said there is a need for greater capacity so that producers have somewhere to place the gas they produce over the summer.



COURTESY ZIFF ENERGY GROUP

North America gas storage basins

20 percent of gas lacks destination once injections wind down

Currently, the firm estimates that once injections wind down in September, 20 percent of North American output has no destination.

The United States Energy Information Administration has forecast liquefied natural gas imports to the United States will rise 44 percent this year to 840 billion cubic feet and Ziff believes that number will climb to 10 bcf by 2010 and 15 bcf by 2015, with deliveries from Nigeria, Norway and Yemen to the Gulf Coast costing about US$4 per thousand cubic feet, indicating those controlling supply can absorb low prices in that range.

But the impact of growing LNG imports is not necessarily seen as a negative for Canadian gas, which faces a production decline in 2008 that the Conference Board of Canada expects will last for a number of years.

For now, the Canadian industry is being pulled in several directions, with even the positives failing to generate a widespread turnaround.

The heaviest blows are being absorbed in northeastern British Columbia and Alberta, where drilling costs have been trimmed 5-10 percent without any measurable impact on the upside.

Well completions have slipped 10 percent overall from 2006, with gas wells tallying 7,400 over the first seven months, the lowest count in four years.

Regulators across Canada have issued 12,596 well permits for the January-July period, off 27 percent from last year's record 17,386 and a five-year low.

The brunt has been taken in the gas sector, with licenses to drill for conventional gas and coalbed methane in Alberta, British Columbia and Saskatchewan tumbling to 6,645, off 40 percent from last year.

Alberta conventional gas well approvals fell 42 percent to 4,567, while CBM licenses dropped 38 percent to 861; British Columbia took a 31 percent nosedive to 522; and Saskatchewan slipped 26 percent to 686.

Penn West Energy predicts gas drilling comeback this winter

Emerging from the grab-bag of gas-related corporate announcements were:

• FirstEnergy Capital is reporting that Western Canada storage facilities are close to 90 percent full, three months ahead of last year's rate of injections, with negative implications for spot prices. The research note said Canadian spot prices could slide under last year's low of C$3.45 per gigajoule.

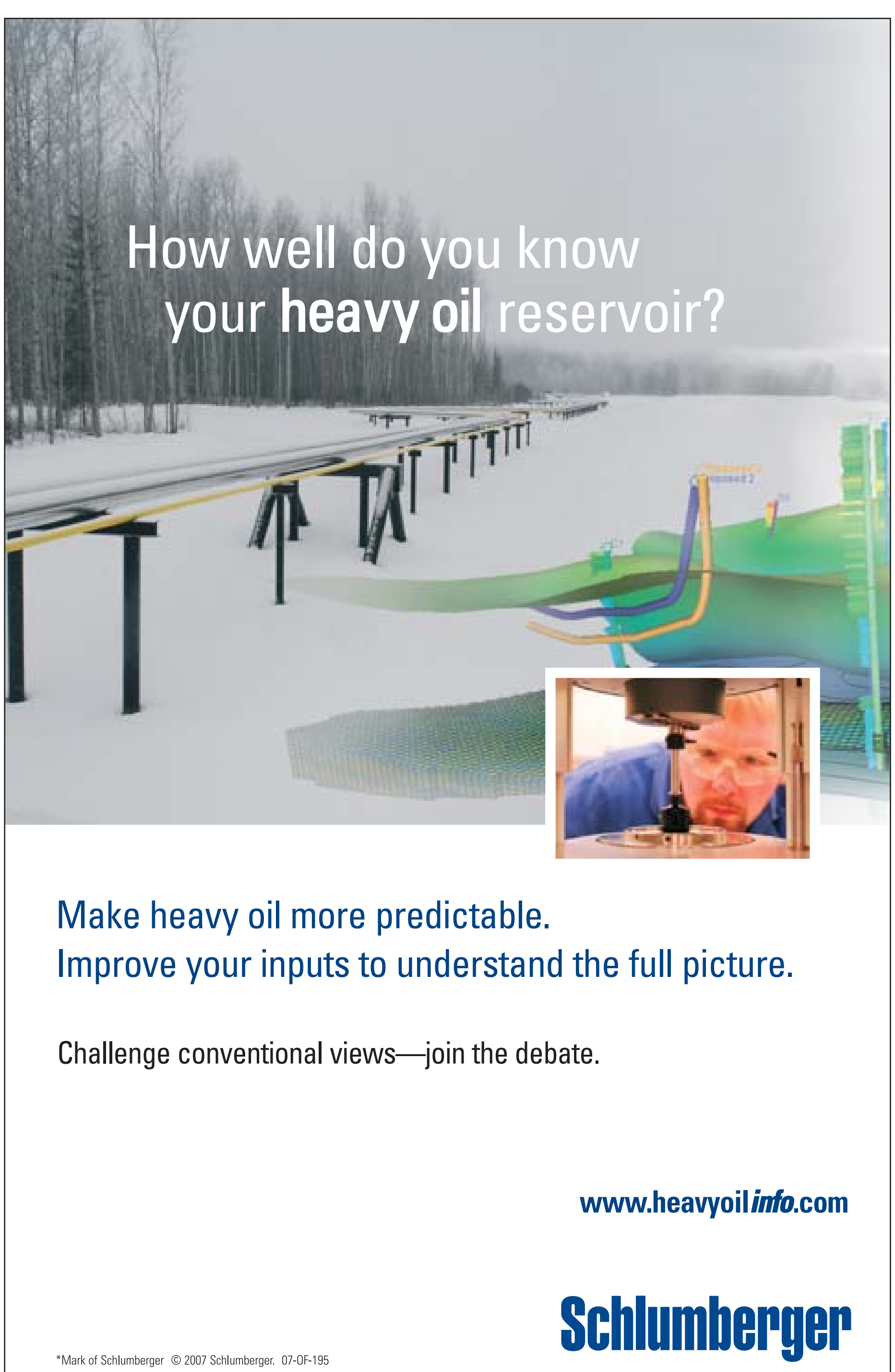
• Compton Petroleum is sticking with its plans for an aggressive second half, targeting 350 gas wells, up 20 percent from its original capital budget, despite taking a buffeting in the first half. But it has lowered its production guidance to 31,000-32,000 barrels of oil equivalent, down 6,000 boe per day. "We are very confident in the future of natural gas," said Chief Executive Officer Ernie Sapieha. Compton believes its ramped-up drilling program will benefit from lower costs and better access to services and equipment.

• Chief Executive Officer Bill Andrew of Penn West Energy Trust, North America's largest conventional oil and gas trust, predicted gas will stage a comeback this winter as service costs drop, gas prices rise and producers adopt a more realistic stance in their price forecasts. He said the fact that U.S. drilling last winter was "very active" while Canada had virtually no drilling reflected the cost of services in Canada. Andrew said it is now possible to "make the numbers work again" with gas prices at C$6-$7 per thousand cubic feet.

• High Arctic Energy Services, with its Canadian rig utilization rates at 23 percent, reported a 43 percent drop in domestic revenues, while its international revenue soared 75 percent. Chief Executive Officer John Wood said the company is "very excited about the growth opportunities in the international market," but plans to retool its operations in conjunction with the current Canadian downturn.

• Total Energy Services Trust reported only 2 percent utilization for its contract drilling division in the second quarter, logging just 22 operating days for a fleet of 12 rigs. President Daniel Halyk said the trust's business slumped around mid-June, but Total does not want to lead the way in price cutting and has rejected some projects where it has had concerns about getting paid. "We just won't take work for the sake of getting work," he said. Halyk said the last thing the trust wants to do is impose wage rollbacks.

• Pure Energy Services reported a 57 percent decline in overall job counts in the second quarter, forcing the company to scale back its forecast 2007 revenue by 23 percent to C$133 million, reflecting its Canadian performance. In contrast, its United States operations posted a 90 percent revenue hike in the second quarter from a year earlier. ●



GBR Equipment Inc.
"Where Service & Quality Control Come First"
Bobby and Billy Reynolds
6300 Petersburg Street
Anchorage, Alaska 99507
Ph: (907) 535-3550
Fx: (907) 562-6468

NATURAL GAS

ANGDA on schedule with application

Plans to put AGIA in-state application addendum in public before anyone else has to submit to maximize chance of being picked up

By KRISTEN NELSON
Petroleum News

The deadline for submittal of applications under the State of Alaska's Alaska Gasline Inducement Act has been extended to Nov. 30.

But the Alaska Natural Gas Development Authority, which will be submitting an application for the in-state portion of the project only, intends to have its proposal available well before the new deadline to maximize the chance that it will be included with main-line applications, ANGDA CEO Harold Heinze told the authority's board Aug. 15.

"There's a real advantage to ANGDA and our application addendum being on the table, in the public realm, well before anybody else has to submit anything," he said.

Heinze said the goal is "to assure that we have the maximum chance of being picked up" and included in main-project applications.

He said ANGDA's application addendum should be in the public realm around the last week of October.

Many Southcentral utilities

The board got an update on various application-related contracts, including one on scenarios for Cook Inlet energy supply, to determine consumer benefits from a spur line.

Scenarios include: North Slope gas by spur line; other gas sources; coal; renewables; and a fifth plan in which electric utilities in Southcentral "cooperatively develop a mix of fuel sources to generate electric power" and Cook Inlet natural gas is used to meet residential gas demand.

Heinze said the intent of the integrated plan, scenario five, "is to execute the energy development of this area (Southcentral Alaska) as if it was all one," with customers all paying the same rates.

Because there are a number of utilities in the area, Heinze said "there is no basis today for scenario five," although there is a basis for some elements. He said that in a similar-sized area in the Lower 48, Southcentral would be served by "half a utility" — instead it is served by seven.

One reason that happened is that gas was "dirt cheap. It didn't matter that we were inefficient. It does matter now and … how to transition from this very multiple, fractured setup to a combined setup is very difficult."

Heinze said that is why current discussions between Chugach Electric Association and Municipal Light and Power are so important: If that merger is successful, he said, it's a big step in the direction of integrating Southcentral's power utilities.

Spur line issues

Consultant Steve Pratt described educational workshops he is preparing for ANGDA exploring the dynamics of North Slope gas transactions in Alaska concluding with a practice open season.

Topics which would be covered in the workshops include the gas transmission infrastructure that would be available including offtake points. "The whole purpose here is to emphasize the infancy of Alaska's gas transmission network" and point out that infrastructure development reacts to market forces and if utilities don't come to an open season, then the infrastructure that is built won't reflect their needs, Pratt said.

There is an extensive gas pipeline infrastructure in the Lower 48 and because of that, he said, transactions in the Lower 48 are simplified both for buyers and sellers of natural gas.

FORREST CRANE

HAROLD HEINZE

Also covered in the workshop would be required transactions to get North Slope gas to Cook Inlet. To get North Slope natural gas to Beluga would require: North Slope gas purchase contracts; pipeline take-or-pay contracts in a Federal Energy Regulatory Commission open season; pipeline take-or-pay contracts in a Regulatory Commission of Alaska open season for the spur line; a shipping agreement between Palmer and Beluga; and a storage agreement at Beluga.

The changing paradigm

Pratt said people have to be able to envision, once the infrastructure is in place, that "it totally changes the paradigm for how people can continue to operate their businesses — it increases their options. It gives them different places to obtain energy supplies." For example, if gas is found in the Copper River basin, gas could be put into the line there. The same would be true at Nenana, he said.

Tariff cost drivers will also be discussed, Pratt said: construction costs; financing; and committed throughput volume. There is very little local control over the first two costs in Southcentral, he said, but there is local control over throughput volume. "The more volume you put into the pipeline, the cheaper it is for everybody," he said.

Collective action benefitting everyone will be a topic in the workshop, Pratt said.

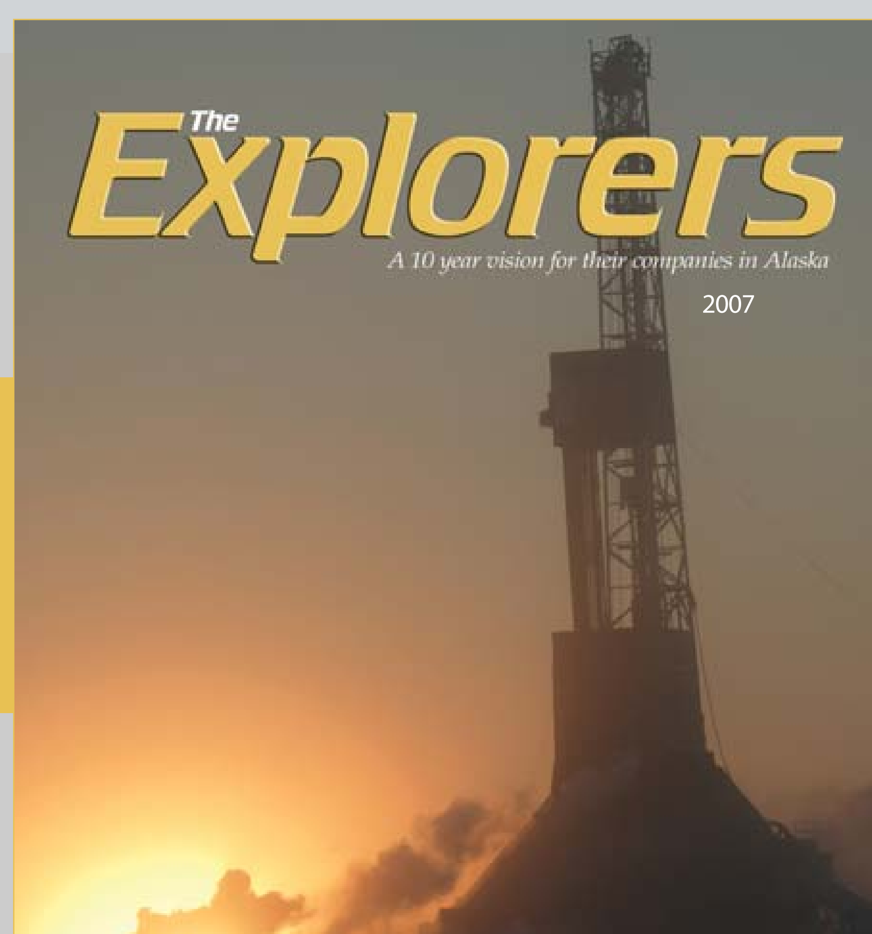
"It's actually likely that either everyone's going to get cost-effective North Slope gas or nobody will," he said. Chugach Electric Association, ML&P and Enstar are the major local gas purchasers: "If any one of those entities decides that they don't want to participate in an open season, then it's likely that nobody will," he said. And then it would be very difficult to make a spur line happen.

The workshop will help utilities understand how the open season rules and processes work, Pratt said.

The other thing utilities need to think about, Pratt said, is whether they want to participate individually or collectively. There are high costs, he said, for participation. Does it make sense for multiple entities to do all these things, he asked, "or does it make sense for us to do something collectively?" That, he said, is a decision each entity will have to make.

Pratt said an example of an aggregator in the Lower 48 is Public Gas Partners Inc. out of Georgia which acquires long-term gas supplies for participating agencies and large public natural gas or power systems in six states in the Southeast.●

DON'T BE LEFT OUT!



If you do business in Alaska, the advertising deadline for The Explorers 2007 is September 28. Don't be left out, call today!

Contact Susan Crane, advertising director at (907) 770-5592, or visit www.PetroleumNews.com for more details.

FINANCE & ECONOMY

Alberta construction strike averted

Fears of strike action that could have derailed billions of dollars worth of construction work in the Alberta oil sands have eased dramatically.

Four of five unions, each of which voted overwhelmingly in support of a strike in July, negotiated tentative pacts that go to their combined 23,000 members for a ratification vote.

If the deal is approved by Sept. 11, the agreements offers retroactive pay and — in a key breakthrough for union negotiators — wages that are indexed to a rate higher than the raging inflation in Alberta.

The contract terms include pay hikes of 6.5 percent, 5 percent, 6.5 percent and 5 percent in each of the next four years, or increases equivalent to Alberta's inflation rate plus 1 percent.

Union leaders: provisions 'historic'

Union leaders say the provisions represent "historic" protection from the cost-of-living increases in Alberta — an issue one said was previously "taboo" in the province.

A spokesman for Construction Labor Relations Alberta, which bargains for 130 contractors, said that because the agreements are "fully inflation-protected" they will ensure a "good period of stability" in Alberta's boom-time economy, provided they are endorsed.

A province-wide strike would have been the first to hit the province's oil and gas industry since 1980 and would have occurred as Alberta embarks on what shapes up as the most prolonged period of large-scale construction activity in Canada.

A province-wide strike would have been the first to hit the province's oil and gas industry since 1980 and would have occurred as Alberta embarks on what shapes up as the most prolonged period of large-scale construction activity in Canada.

But three unions — carpenters, laborers and roofers — are still involved in negotiations and seem headed for a strike vote.

However, ratification votes by the four trades which have accepted the new offer — electricians, plumbers and pipefitters, refrigeration mechanics and millwrights — will block any attempts to strike.

Alberta labor law bans strikes if 75 percent of the unions accept contracts terms. To date 15 of 25 unions have settled and four more would push the labor movement over the threshold.

—GARY PARK

LAND & LEASING

MMS calls for info for multiple-sale EIS

The U.S. Department of the Interior's Minerals Management Service is going to do a multiple-sale environmental impact statement for its proposed Beaufort and Chukchi seas lease sales, a procedure it adopted for Alaska outer continental shelf waters in 2001 when it did a multiple-sale EIS for three Beaufort Sea sales.

MMS issued a call for information and nominations Aug. 23 in the Federal Register for a multiple-sale EIS for Beaufort Sea (2009 and 2011) and Chukchi Sea (2010 and 2012) sales included in the agency's OCS 2007-12 proposed five-year leasing program.

A February 2008 Chukchi Sea sale is not included; that sale is a carryover from the 2002-07 five-year program, the agency said.

The multiple-sale EIS will be the final National Environmental Policy Act and Coastal Zone Management Act consistency determination for the 2009 and 2010 sales. The agency said it will prepare additional documents as appropriate for the 2011 and 2012 sales.

Information and nominations are due within 45 days of the Federal Register notice.

Companies making nominations must rank areas in which they have an interest, either high or medium. "Respondents must be specific in indicating blocks by priority and be prepared to discuss their range of interest and activity regarding the nominated areas(s)," MMS said. The MMS Alaska OCS Regional Office will contact nominators to set up a meeting to more fully review nominations.

Process used in Gulf

While the multiple-sale, multiple-planning area EIS "is a new approach for the MMS Alaska OCS Region … it has been used for sales in the Gulf of Mexico Region," MMS said.

Federal offshore leasing began in the Beaufort Sea in 1978 and in the Chukchi Sea in 1988. Beginning with the 2002-07 program, a multi-sale EIS was prepared for three Beaufort Sea sales.

"Because many of the issues are the same, we plan to evaluate sales in both the Chukchi and Beaufort seas together," MMS Alaska Regional Director John Goll said in a statement. "This approach will make it easier for the public and us to key in on the most important issues and their effects."

MMS said there are several benefits to the approach: a thorough description of the effects of individual proposed actions — the four lease sales — "and cumulative effects of reasonably foreseeable future actions within and across the two areas."

—PETROLEUM NEWS

UNIVAR
Your Alaskan Chemical Source since 1924
• Products & Services for Oil, Gas — Production, Processing & Refining
•Mining, Municipalities, Aviation & the Transportation Industry
• Meeting your chemical waste needs with our exclusive ChemCare® Waste Management Services
For Statewide Service call:
800-478-7444 • www.univarusa.com
590 E. 100th Avenue • Anchorage, AK 99515

WORKFORCE DEVELOPMENT

Deadline for training grants extended

The Alaska Department of Labor and Workforce Development has extended the deadline for grant applications for worker training and employment projects under the State Training and Employment Program to Sept. 7 at 5 p.m.

STEP targets people who have contributed to the state unemployment trust fund and are either unemployed or likely to become unemployed within six months.

Those eligible to apply for funding under the program include nonprofit and for-profit organizations, educators, industry trainers, employers and agencies with the capacity to meet both the legal and policy requirements for STEP grants.

The grants are limited to a maximum of $300,000 per application, unless the department determines that a higher amount is appropriate.

Further information can be found in the state Web site at: www.state.ak.us.

Click on "Notices" in the top menu bar, view by published date of Aug. 6, 2007, and select "State Fiscal Year 2008 State Training and Employment Program Grant Application."

—ALAN BAILEY

American Marine Services Group
6000 A Street, Anchorage, AK 99518
907-562-5420
www.amarinecorp.com • www.penco.org
alaska@amarinecorp.com
AMERICAN MARINE CORPORATION
• Commercial Diving
• Marine Construction Services
• Platform Installation, Maintenance and Repair
• Pipeline Installation, Maintenance and Repair
• Underwater Certified Welding
• NDT Services
• Salvage Operations
• Vessel Support and Operations
PENCO PACIFIC ENVIRONMENTAL CORPORATION
• Environmental Services
• Oil-Spill Response, Containment and Clean-Up
• Hazardous Wastes and Contaminated Site Clean-Up and Remediation
• Petroleum Vessel Services, e.g. Fuel Transfer
• Bulk Fuel Oil Facility and Storage Tank Maintenance, Management, and Operations
Anchorage Honolulu Los Angeles

People and Resources that get the job done
Hawk CONSULTANTS LLC
Providing project management professionals for major projects throughout Alaska and the world.
Ph: (907) 278-1877 • Fx: (907) 278-1889
www.hawkpros.com • info@hawkpros.com
670 W. Fireweed Lane, Suite 201, Anchorage, AK 99503


● EXPLORATION & PRODUCTION

Newfoundland, Hebron partners cut deal

Memorandum of understanding signed between province, Chevron-Canada led offshore oil consortium; details of MOU confidential

By GARY PARK
For Petroleum News

To paraphrase Winston Churchill, this is not the beginning of the beginning, or the end of the end, but it does appear to be the end of the beginning.

With talk of a "spirit of cooperation and good faith," and a "fair and reasonable deal" flowing from his lips, Newfoundland Premier Danny Williams proclaimed victory for his government and his province Aug. 22 in announcing a memorandum of understanding with the Chevron-Canada led Hebron-Ben Nevis offshore oil consortium.

Even James Bates, chief negotiator for Chevron, was happy to characterize the deal as a "win for both sides."

But there were signs that the industry partners are not quite ready to forgive and forget after being scorned and threatened by Williams over the 16 months since the first attempt to strike an MOU folded amid acrimony.

Chevron did not send a representative to the news conference in St. John's, Newfoundland.

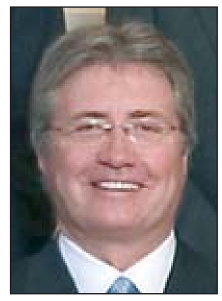
Williams put that down to "logistical" problems, telling reporters: "Don't read anything into it."

Whatever differences might still linger, it seems the two sides might have realized time was running out.

Williams noted that Newfoundland is about to enter a decade of major construction work.

On the table are plans for a C$1 billion LNG transshipment and storage terminal by Newfoundland LNG; a C$4 billion, 600,000 barrel per day refinery by Newfoundland and Labrador Refining; and the mammoth Lower Churchill hydroelectric scheme which could cost C$9 billion.

He said the demands those undertakings will place on Newfoundland's manpower and manufacturing resources may have brought the Hebron partners back to the negotiating table and hastened the decision making.


Newfoundland Premier Danny Williams

Details of MOU confidential

But Williams and Bates tiptoed around the details of the MOU, citing a confidentiality agreement.

Bates said the two sides have been able to "bridge the gaps" that led to the negotiating breakdown last year.

He described the MOU as an "essential first step, but it's just a first step to get this project back on track."

Many matters "still need to be covered in a formal agreement," he said.

Williams indicated that front-end engineering and design work could start within 18 months, leading to a start of construction in 2010 on the C$5 billion project.

Given that the Newfoundland government estimates Hebron could produce for 25 years to 2040 that points to a possible startup in 2015.

The Newfoundland government also said the owners expect to achieve peak production of 150,000 to 170,000 barrels per day.

Bates declined to confirm any of those numbers, saying a construction schedule will have to await a final agreement.

He said updated technical work puts Hebron's resources at 400 million to 700 million barrels, but the consortium is a long way from projecting peak output numbers.

For confidential reasons, Bates could not say how the Hebron ownership structure would line up if the project goes ahead with Newfoundland as an equity partner.

When the project team was disbanded, the partners were Chevron 28 percent, ExxonMobil 37.9 percent, Petro-Canada 23.9 percent and Norsk Hydro Canada 10.2 percent.

Newfoundland can earn equity

What has emerged from the MOU deal is that Newfoundland can earn a 4.9 percent equity stake and that the pieces are in place for a royalty regime that will ensure the province earns a greater share of proceeds than from the existing Hibernia, Terra Nova and White Rose projects.

The major potential benefit stems from a "super royalty" of 6.5 percent when oil prices climb above a monthly average of US$50 per barrel and after net royalty payout occurs.

What has emerged from the MOU deal is that Newfoundland can earn a 4.9 percent equity stake and that the pieces are in place for a royalty regime that will ensure the province earns a greater share of proceeds than from the existing Hibernia, Terra Nova and White Rose projects.

But Williams conceded there were "three major gives" by his government, including an increase of C$10 million in its equity purchase price to C$110 million, a reduction in its royalty claim by C$20 million to C$30 million and an extended royalty payout period.

However, he said the risk was necessary to put Newfoundland on a path to the "economic self-reliance to which we have long aspired."

Williams said the province is now ready to enter a "new era of offshore oil development with unprecedented benefits to the people of our province, including taking real and meaningful ownership of our resources."

One of the next steps will be the government's unveiling of a new energy plan before an Oct. 9 election when it is expected to mandate a specific government ownership position for all future offshore projects. ●

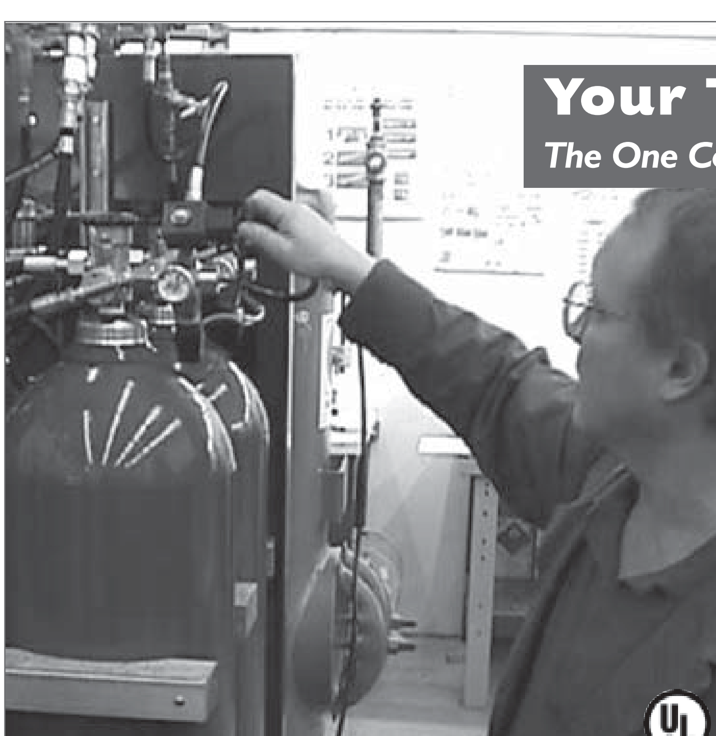
FRIENDS OF PETS
P.O. Box 240981
Anchorage, AK 99524

TEDDY IS A PLAYFUL 8 MONTH OLD SHEP/HUSKY NEUTERED MALE LOOKING FOR AN ACTIVE LIFESTYLE. HE WOULD BE A GREAT HIKING OR SKIING PARTNER. FOR ADOPTION INFO CALL 333-9534 OR APPLY ON-LINE @ WWW.FRIENDSOFPETS.ORG.

A LISTING OF ALL AVAILABLE PETS IS ALSO AVAILABLE ON THE WEBSITE.


COURTESY ALASKA PETOGRAPHY

FOR SALE
Bed and Breakfast on the Park
Beautiful home on the Park Strip, 7 bedrooms, 9 baths, 6,108 sq. ft.
Location, location, location. Custom home with in-floor heat, tile floors, sunroom, sauna, Jacuzzi, gourmet kitchen with granite island. Price includes turn-key B&B business with all furnishing except art and personal items. Endless possibilities.
Licensed for B&B and rooming house.
Call: 907 222 0878 or 800 353 0878
$1,250,000


Your Total Protection Team
The One Complete Source for Design, Installation & Service

- Fire Alarm & Detection
- Marine Systems
- Fire Sprinkler Systems
- Portable Fire Extinguishers
- Certification Inspections
- Facility Survey
- Special Hazard Suppression
- Electrical Security Systems

Anchorage, Alaska
ph: 800 478-7973 | fx: 907-274-6265
ENGINEERED FIRE & SAFETY

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

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

Petroleum news

Business Spotlight

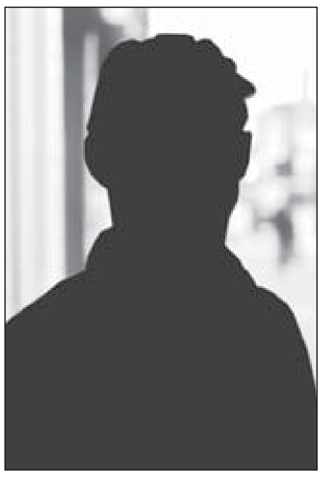
FORREST CRANE

Luke Walker, Sales Representative

Alaska Tent and Tarp

Alaska Tent and Tarp is a longtime Alaska company which opened its doors in the 1950s. It produces and repairs many products such as industrial covers, winter fronts, Arctic oven extreme tents, wall tents, boat tarps and many other custom products. Alaska Tent and Tarp also sells woodstoves and camping accessories.

Luke Walker earned a business administration degree with an emphasis in marketing and management from Western State College of Colorado in Gunnison. He joined Alaska Tent and Tarp in May 2006 and, although he lacked experience in fabrication and sewing, he has enjoyed learning the business. Luke is single and spends as much time as possible hiking, skiing, weightlifting, biking, boating and fishing.



Call today to feature your company and key people here!

Contact Susan Crane or Amy Spittler at (907) 522 9469 for details.

Petroleum news

continued from page 1

GULF SALE

acting director for the Gulf region, told Petroleum News.

"If you compare apples to apples, in other words the same blocks that would have been offered if the size were the same in the two lease sales, then compare them to the amount of bids, this was a more successful sale," Herbst explained.

Ultra-deepwater the focus

Unlike some past sales in both the Western and Central Gulf, the high rollers this time around were focused on the "ultra-deepwater" of 5,000 feet and greater, although the relatively shallow waters of the Gulf's continental shelf saw the return of one of the Gulf's major players, BP Exploration and Production. BP, which previously sold all of its producing properties on the shelf, appeared to be adding to its inventory of "ultra-deep" natural gas prospects.

Still, the ultra-deepwaters of Alaminos Canyon and Keathley Canyon drew the monster bids from explorers who appeared to be in hot pursuit of the so-called Lower Tertiary, the Gulf's hottest new play which already has led to large discoveries in both Alaminos and Keathley canyons, as well as in Walker Ridge located next door in the Central Gulf planning area.

"In the deepwater there was very high bidding related to known prospects, but there was some other general deepwater leasing that was directly related to the successes in the Lower Tertiary," Herbst said.

Lower Tertiary proved at Jack

Last year's highly anticipated production test of the Chevron-operated Jack prospect in Walker Ridge proved that the Lower Tertiary could support commercial production. Since, a group led by Shell announced the go-ahead of Alaminos Canyon's Perdido Foldbelt hub development initially consisting of three discoveries — Great White, Silvertip and Tobago.

Statoil's sale-high bids of $37.58 million and $27.58 million were submitted on two Alaminos Canyon blocks (810 and 811) located near the Perdido project, which will be supported by the first subsea pipelines extending so far into the Western Gulf. In fact, nine of the highest bids in the entire sale were for blocks in Alaminos and Keathley canyons.

"What we mainly make of it is that Statoil is really ready to make a presence known in the Gulf," Herbst said. "Not that they haven't participated in any previous sales, but they have definitely taken an interest in this lease sale, to pick up their lease inventory in the Gulf of Mexico."

Statoil, which has become a major player in the U.S. Gulf through key acquisitions, far out-paced the field in terms of the amount of money spent in Sale 204, submitting $138.88 million to capture 33 blocks. In addition to the two highest bids in the sale, Statoil also was the apparent winner on five other top-ten blocks: Keathley Canyon block 178 ($13 million), Keathley Canyon block 136 ($11 million), Keathley Canyon block 135 ($9 million), Alaminos Canyon block 767 ($6.6 million) and Keathley Canyon block 405 ($5.2 million).

"These deepwater leases are promising acreage we look forward to develop in the years to come and they will contribute to securing our long-term commitment in the area," said Oivind Reinertsen, senior vice president at Statoil's office in Houston, Texas.

Devon, Petrobras in top 10

Other top-10 winners in terms of highest single bids included Devon Energy and Brazil's Petrobras, with a joint bid of $15.1 million on Keathley Canyon block 94. Devon and Petrobras, 50-50 partners in the Lower Tertiary Cascade development in Walker Ridge, teamed up on numerous blocks in Sale 204. Rounding out the top 10 high bidders were LLOG Exploration Offshore, with an $8.63 million bid on High Island Area block 138, and Bois d'Arc Properties, with a $5.71 million bid on Alaminos Canyon block 943.

BP was among the thriftier sale participants, doling out just $31.01 million in high bids for 91 blocks, including a pot load beneath the gas-prone waters of the continental shelf. Other big winners, based on the total number of high bids submitted, included: ConocoPhillips with 24 blocks ($12.34 million), Anadarko Petroleum with nine blocks ($4 million), Focus Exploration with eight blocks ($1.74 million), Hunt Oil with five blocks ($630,608), Canada's Nexen Petroleum with four blocks ($1.41 million) and Hydro Gulf of Mexico with 12 blocks ($9.99 million). Last year Statoil acquired Hydro, greatly enhancing its deepwater position in the U.S. Gulf. ●

continued from page 1

SHAKE-UP

Word that Prentice will retain control of the Mackenzie project file was widely welcomed, given that four other ministers have been entrusted with that job over the past eight years.

Handley said the negotiating gap has been narrowed "substantially" and is hopeful a deal is within sight.

Prior to Prentice's transfer "we were only two items away from settling and having an agreement in principle. We came very close," he said.

Chuck Strahl new at Indian Affairs and Northern Development

Handley hopes Prentice's successor, former Agriculture Minister Chuck Strahl, will get up to speed on the issues and meet with him before Oct. 1. He is also anxious that Strahl will offer some continuity, rather than begin negotiations anew.

There has been some forward movement on two other projects of vital importance to the NWT's economy — completion of a highway to the northern Mackenzie Delta port of Tuktoyaktuk and construction of the Mackenzie Valley pipeline.

"We believe the Mackenzie Gas Project is too advanced, too desirable and too important to the Northwest Territories to allow it to fail," he said.

Speculation on Handley's successor focuses on Finance Minister Floyd Roland.

Former NWT Premier Nellie Cournoyea, leader of the Inuvialuit aboriginal region, gave Handley a large helping of credit for the effort he has expended on the Mackenzie project, particularly for securing a long-term C$500 million socioeconomic fund to enable aboriginal communities to deal with the impact of a pipeline.

Had it not been for Handley's support, she doubted the Inuvialuit would have been able to handle the issue, she said.

Prentice had solid reputation

Prentice, considered one of Harper's few and most trusted advisers, gained deep respect among First Nations and within the industry during his first 18 months in cabinet.

He entered politics with a solid reputation among aboriginal leaders.

As a lawyer, he had been commissioner of the Indian Specific Claims Commission — an independent agency that handles land claims disputes — from 1992 to 2001, but he leaves the cabinet post with a mountain of unresolved claims still on the table.

Pierre Alvarez, president of the Canadian Association of Petroleum Producers, gave a vote of support to Strahl, praising his handling of difficult agriculture issues with national implications.

Word that Prentice will retain control of the Mackenzie project file was widely welcomed, given that four other ministers have been entrusted with that job over the past eight years.

Cournoyea told the Canadian Broadcasting Corporation that Prentice's knowledge of the file and his support of "responsible economic development" is key to the pipeline's future direction.

Stephen Hazell, executive director of the Sierra Club of Canada, said Harper's decision to leave Prentice in charge of the issue is more a reflection of the government's priorities for a pipeline.

He said Prentice comes from Calgary and Calgary will derive the greatest economic benefits from the project going ahead, with Edmonton next, trailed by the North.

Hazell is worried the Harper government will end up negotiating subsidies with the Mackenzie Delta producers anchoring the project to ensure a pipeline is built. ●

Kids' Kitchen Raffle

WIN A HARLEY-DAVIDSON MOTORCYCLE WHILE FEEDING CHILDREN!

ALL SUMMER LONG KIDS' KITCHEN IS CELEBRATING 11 YEARS OF FEEDING ANCHORAGE'S HUNGRY CHILDREN AT THE DOWNTOWN SATURDAY-SUNDAY MARKET, THE DOWNTOWN SUMMER FEST, BY SPONSORING A RAFFLE WITH A GRAND PRIZE OF A HARLEY-DAVIDSON MOTORCYCLE DONATED BY ANCHORAGE'S HOUSE OF HARLEY-DAVIDSON.

EVERY DOLLAR OF THE $20.00 TICKET PRICE WILL BE GIVEN TO KIDS' KITCHEN!

$20 PER TICKET OR $250 FOR A BAKER'S DOZEN OF 13 TICKETS

TICKETS AVAILABLE AT THE HOUSE OF HARLEY-DAVIDSON BOOTH (# 264) AT THE SATURDAY MARKET ON WEEKENDS AND DURING THE WEEK AT THE HOUSE OF HARLEY-DAVIDSON, 4334 SPENARD ROAD. YOU MAY CALL 274-8522 FOR FURTHER INFORMATION.

BIKE ON DISPLAY IS THE SAME ONE THAT WILL BE GIVEN TO THE WINNER. MUST BE 18 YEARS OR OLDER TO WIN. TICKETS ARE AVAILABLE FOR PURCHASE THROUGH SEPTEMBER 8, 2007.

(Raffle Permit #801, Omega Psi Phi Fraternity, Inc. Gamma Alpha Alpha Chapter #786)

UOSS UDELHOVEN
Oilfield System Services, Inc.

Serving Alaska for over 30 years...

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

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

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

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

www.udelhoven.com

continued from page 1

LIMBO

Table 2-1. Alternative Summary Comparison Table

Alternative	Lands Available for Use	Protective Measure	Leasing and Occupancy Restrictions
No Action Alternative (Alternative A; 1998 Northeast IAP/EIS ROD)	Approximately 4,000,000 acres (87%) available for leasing	79 prescriptive stipulations as described in the 1998 Northeast NPR-A IAP/EIS ROD and listed in Table 2-2 and Appendix D	Areas north and east of Teshekpuk Lake unavailable for leasing (approximately 600,000 acres) No Surface Activity Restriction (approximately 250,000 acres southwest, south, and southeast of Teshekpuk Lake) Restricted Surface Occupancy near streams and lakes (approximately 825,000 acres)
Alternative B	Approximately 4,387,000 acres (95%) available for leasing	Performance-based stipulations and ROPs as listed in Table 2-2 and Appendix E	Goose molting/caribou habitat use area north of Teshekpuk Lake unavailable for leasing (approximately 213,000 acres) Restricted Surface Occupancy near streams, lakes, and coast (approximately 977,000 acres)
Alternative C	4,600,000 acres (100%) available for leasing (entire Planning Area)	Performance-based stipulations and ROPs (same as Alternative B, except Stipulation K-1g)	All areas available for leasing Restricted Surface Occupancy near streams, lakes, and coast (approximately 1,113,000 acres)
Alternative D	***Approximately 4,389,000 acres (95%) available for leasing***	Performance-based stipulations and ROPs, similar to those identified for Alternatives B and C, but including 3 additional site specific stipulations. These stipulations and ROPs are listed in Table 2-2 and Appendix F	Teshekpuk Lake (211, 000 acres) lease indefinitely deferred from leasing Restricted Surface Occupancy total 1,451,000 acres • 240,000 acres north of Teshekpuk Lake within the Goose Molting Area restricted to no permanent oil and gas development other than pipelines. (No alternative procedures will be approved.) • 288,000 acres within Caribou Movement Corridors and Southern Caribou Calving Areas restricted to no permanent oil and gas development other than pipelines • 7 Lease Tracts north of Teshekpuk Lake; permanent surface disturbance resulting from oil and gas activities other than pipelines is limited to 300 acres within each lease tract • No permanent oil and gas facilities within a ¼ mile of the ordinary high water mark of Teshekpuk Lake

BUREAU OF LAND MANAGEMENT

might not be as eager as George Bush to encourage domestic oil and gas production.

The lease sale delay was confirmed on Aug. 20 with the release of BLM's draft plan for the Northeast section of NPR-A, which is out for public comment from Aug. 24 to Oct. 23, and which carries the more cumbersome name, "draft supplemental integrated activity plan/environmental impact statement." BLM often shortens the last six words to IAP/EIS.

But the story surrounding the possible derailing of the feds' plan for oil and gas leasing in NPR-A started much earlier, in the late 1980s and early 1990s when anti-development groups fought to keep the 1002 area of the Arctic National Wildlife Refuge closed to oil and gas development. One of their arguments was that the much larger 23 million acre National Petroleum Reserve-Alaska, on the other side of the North Slope, was already set aside for oil and gas drilling. After all, it was a ITALICS START HERE petroleum END OF ITALICS reserve.

But in 1997, when President Bill Clinton announced the opening of the 4.6 million acre Northeast corner of the petroleum reserve to oil and gas leasing, the same anti-development groups lobbied against it. They lost that war but won a battle to keep more than 600,000 acres of the most oil-rich acreage in NPR-A off the leasing table. BLM's 1998 final plan (IAP/EIS) for the Northeast planning area did not include the 389,000 acres north and east of Teshekpuk Lake and 211,000 acres under the lake.

Teshekpuk is the largest freshwater body on Alaska's North Slope and a habitat for caribou, migrating birds and other wildlife necessary to the subsistence lifestyle of the Inupiat Eskimos, who depend on wild game for much of their diet. Despite the fact that modern industry activity in the central North Slope had not negatively impacted wild game numbers, anti-development forces fought to keep the 600,000 acres from being leased.

The first Northeast oil and gas lease sale was in 1999, followed by another in 2002, after which the Northwest corner — i.e. planning area — was opened to leasing, with sales held in 2004 and 2006.

Pushing domestic production

Meanwhile, in 2001, President George W. Bush created the National Energy Policy Development Group, which was tasked with developing "a national energy policy designed to help the private sector, and, as necessary and appropriate, state and local governments, and promote dependable, affordable, and environmentally sound production and distribution of energy for the future."

In May 2001, the group released the National Energy Policy report, which formed the basis of the President's National Energy Policy that directed the Secretary of the Interior to "consider additional environmentally responsible oil and gas development, based on sound science and the best available technology, through further lease sales" in NPR-A, specifically noting the unleased oil-rich portions of the northeast corner.

With its marching orders from the Bush administration in hand, BLM set about amending the 1998 plan for Northeast NPR-A, which it released in late 2005 and issued a record of decision for in early 2006.

Anti-development forces filed legal action in March 2006, but BLM plowed forward, planning a Northeast and Northwest NPR-A lease sale for Sept. 27, 2006, that included leases on 373,000 acres north and east of Teshekpuk Lake that had not been offered previously. But the sale excluded acreage under the lake and along the Colville River.

Just before the sale U.S. District Court Judge James Singleton issued a ruling setting aside Interior's 2006 record of decision, saying that the 2005 amended plan for Northeast NPR-A failed to adequately address the cumulative impacts of oil and gas activities in the 600,000 acres of protected wetlands north, east and under Teshekpuk Lake.

In response to the judge's decision, in late 2006 BLM set about reworking its 2005 plan.

Halts South NPR-A planning

The agency also canceled scheduled lease sales for all of NPR-A and stopped its planning work for the southern area of the oil reserve.

"We came to this decision after listening to comments from local communities during our public outreach effort," Interior Assistant Secretary for Land and Minerals Management Stephen Allred said May 14. At public meetings last year the agency said local residents expressed concern over potential impacts to subsistence resources, especially the western Arctic caribou herd, whose primary calving area is within the 9.2 million acre South NPR-A.

"Our decision to stop this effort underscores Secretary Kempthorne's commitment to sound planning decisions and environmental protection," Allred said. "The BLM weighed the practicality of energy development and determined it is not appropriate at this time in the South NPR-A."

BLM resource assessments indicate the South NPR-A planning area contains limited

see **LIMBO** *page 19*

continued from page 18

LIMBO

oil reserves, estimated to be just 2.1 percent of the undiscovered oil in NPR-A. Although the area contains an estimated 27 percent of NPR-A's undiscovered natural gas reserves, there is no transportation system to move the gas to market.

The South NPR-A land use plan isn't likely to be taken up again in the foreseeable future, BLM Alaska District spokeswoman Sharon Wilson told Petroleum News May 15.

Another factor in the decision to stop work, Wilson said, was the agency's desire to channel planning efforts to the supplemental IAP/EIS for the Northeast planning area.

Borough signs on as cooperating agency

In early 2007, the North Slope Borough signed a memorandum of understanding with BLM that gave it the formal status of a cooperating agency for reworking the 2005 amended plan, BLM said Aug. 20.

"The North Slope Borough has contributed valuable information, particularly on public health issues," said Tom Lonnie, BLM state director for Alaska. "Their scientists have reviewed and submitted comments that have been used throughout the document."

In its 2007 draft plan for the Northeast planning area, BLM said its "purpose and need" had not changed from the amended 2005 plan, referring to the President's National Energy Policy that directed the Secretary of the Interior to address "the Nation's need for production of more oil and gas through additional leasing in the Northeast NPR-A."

Alaska crude output expected to drop to 270,000 bpd in 2030

In chapter 4 of the 2007 draft plan BLM noted that the U.S. Department of Energy estimated "the contribution of North Slope crude to domestically produced oil supplies would decline from 18 percent in 2004 to 14 percent in 2020; again, this decline could be mitigated, but not offset, by opening up the Northeast NPR-A to oil and gas exploration." DOE currently estimates that Alaska's oil production "will decline from 860,000 barrels a day to 270,000 barrels a day in 2030. … Depending upon how much additional oil is produced from NPR-A and other future North Slope oil development, these projected production declines may be slowed, or perhaps at some point even reversed," BLM said.

Additional mitigation measures identified in 2007 draft

The range of alternatives in the 2007 draft was "almost entirely unchanged" from those presented in the 2005 version, BLM said, referring to the four proposed alternatives for resource development in Northeast NPR-A that ranged from doing nothing to opening the entire area to oil and gas exploration and development. (See chart adjacent to this story.)

Although many of the types of cumulative impacts are the same in the two plans, the analysis of the increased activity in the Northeast in the 2007 draft expanded and "substantially revised" BLM's "consideration of additional measures that would minimize impacts," the agency said.

BLM said it also "considered results from scientific studies completed since 2005."

The 2007 draft plan also addresses the cumulative impact of increased activity in the Northeast planning area when combined with increased activity in the Northwest planning area, which was something the U.S. District Court said BLM failed to fully address.

The 2007 draft takes into account issues ranging from climate change and potential of Endangered Species Act protections for polar bears to the increasing price of oil. It also, BLM said, presents potential new mitigation measures to address potential adverse impacts to public health — measures that are "in addition to the protective measures incorporated in the alternatives themselves as lease stipulations and required operating procedures."

The additional measures are included in separate description and analysis sections in chapters 3 and 4 of the draft supplement "rather than being presented within the context of other topics, such as subsistence or sociocultural systems, as has been done previously," the agency said.

Anti-development groups call 2007 changes 'cosmetic'

The additional information and analysis in the 2007 version will allow the agency to complete a plan that provides for sound management of Northeast NPR-A, BLM said.

Anti-development groups disagreed, dubbing BLM's changes "cosmetic."

In an Aug. 20 Associated Press report Myke Bybee, a public lands lobbyist for the Sierra Club, was quoted as saying, "The BLM has just slapped a new coat of paint on an old plan." He indicated anti-development forces would wait for the plan to go through the bureaucratic process before moving forward in court.

"Whether there is more litigation would be determined by how the end result looks. It's far too early to know," Bybee said.

BLM does not offer preferred alternative in 2007 plan

Another difference between the 2005 and 2007 plans is that the latest version for Northeast NPR-A does not indicate which alternative of the four BLM prefers. The agency clearly supported a drilling alternative in 2005.

"We paint a picture of how things are right now and come to no conclusions," Wilson told Petroleum News Aug. 22. "We're looking for input from the public first."

Wilson said the original plan that came out in 1998 did not include a preferred alternative.

Lease sales every 2 or 3 years

If the Interior Secretary's record of decision on the final plan for Northeast NPR-A involves a leasing program, BLM said the first sale could occur at the end of 2008, with "subsequent lease sales approximately every 2 to 3 years thereafter."

Each sale "might offer only a portion of the lands identified in the ROD as available, making possible a phased approach to leasing and development," it said.

Legal jurisdiction of North Slope Borough an issue in plan

The nearly 1,500 page 2007 draft plan is worth a close read. In addition to pointing to possible benefits of climate change in chapter 4, BLM cautiously addresses the lingering question of the authority of the North Slope Borough on federal lands within NPR-A in chapter 1.

The North Slope Borough requires permits for certain activities within the Northeast planning area. The borough "believes that it has concurrent jurisdiction within the NPR-A derived from the jurisdiction transferred to the state under the Alaska Statehood Act and the borough's status as a home rule municipality," BLM said.

But "it is BLM's policy to consider the NSB's land management regulations to the extent practical in any decision within NPR-A. Although BLM acknowledges the NSB's local land use plan, it is BLM's position that the borough's plans cannot prohibit activities on federal lands," the Interior agency said. ●

continued from page 1

REGS

BLM "does not expect to have it completed until December 2008," Wilson said. The review, she said, is being "conducted by BLM staff , all levels of management, solicitors (the DOI lawyers), and undoubtedly the Secretary's staff, before it will be final."

The revised rules for oil and gas leasing and unitization will bring NPR-A into compliance with the 2005 Energy Policy Act, clarify some lease-related issues, and bring some regulations more into line with leasing and unitization procedures in other regions and jurisdictions, the agency said.

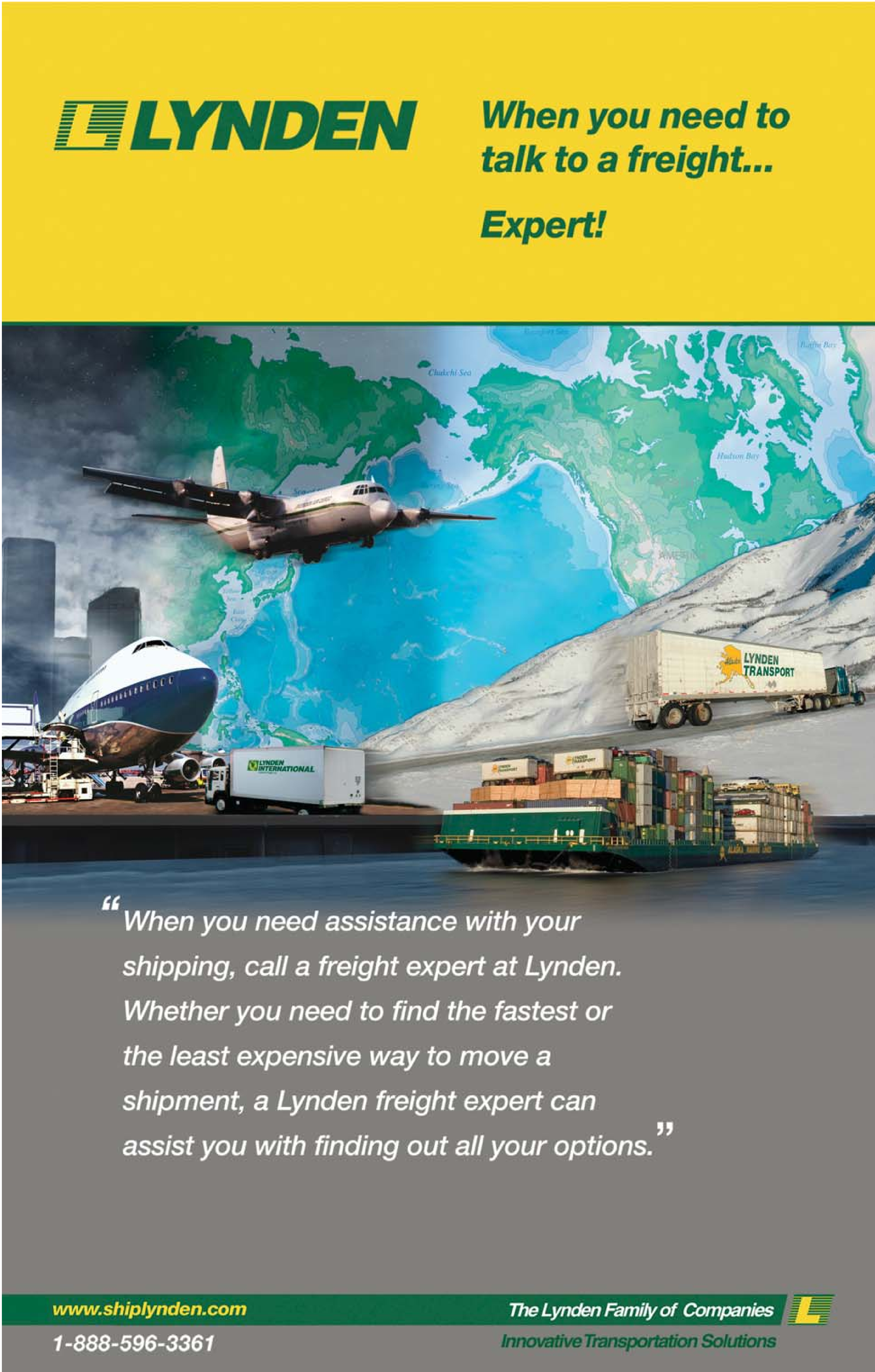
Editor's note: The most recent story about the proposed new regulations was published in the Aug. 5 issue of Petroleum News (http://www.petroleumnews.com/pnads/741917352.shtml).


FABRICATION & REPAIR
General Contractor #27005
Mile 20.5 Kenai Spur Hwy.
North Kenai, Alaska
ph 907/776-8279
fx 907/776-3311
cell 907/252-5466
WELDING SERVICES


NORTH SLOPE TELECOM, INC
INDUSTRIES SERVED
Oil & Gas
Mining
Public Safety
Public Utilities
Government
Transportation
Telecom Engineering & Consulting
Microwave Design & Installation
Satellite System Design & Installation
Remote Site & Power Systems
FCC Licensing & EMESurveys
Fiber Optics & Structured Cable
Two-way Radio Systems
Video Surveillance & SCADA
907-562-4693 | www.nstiak.com

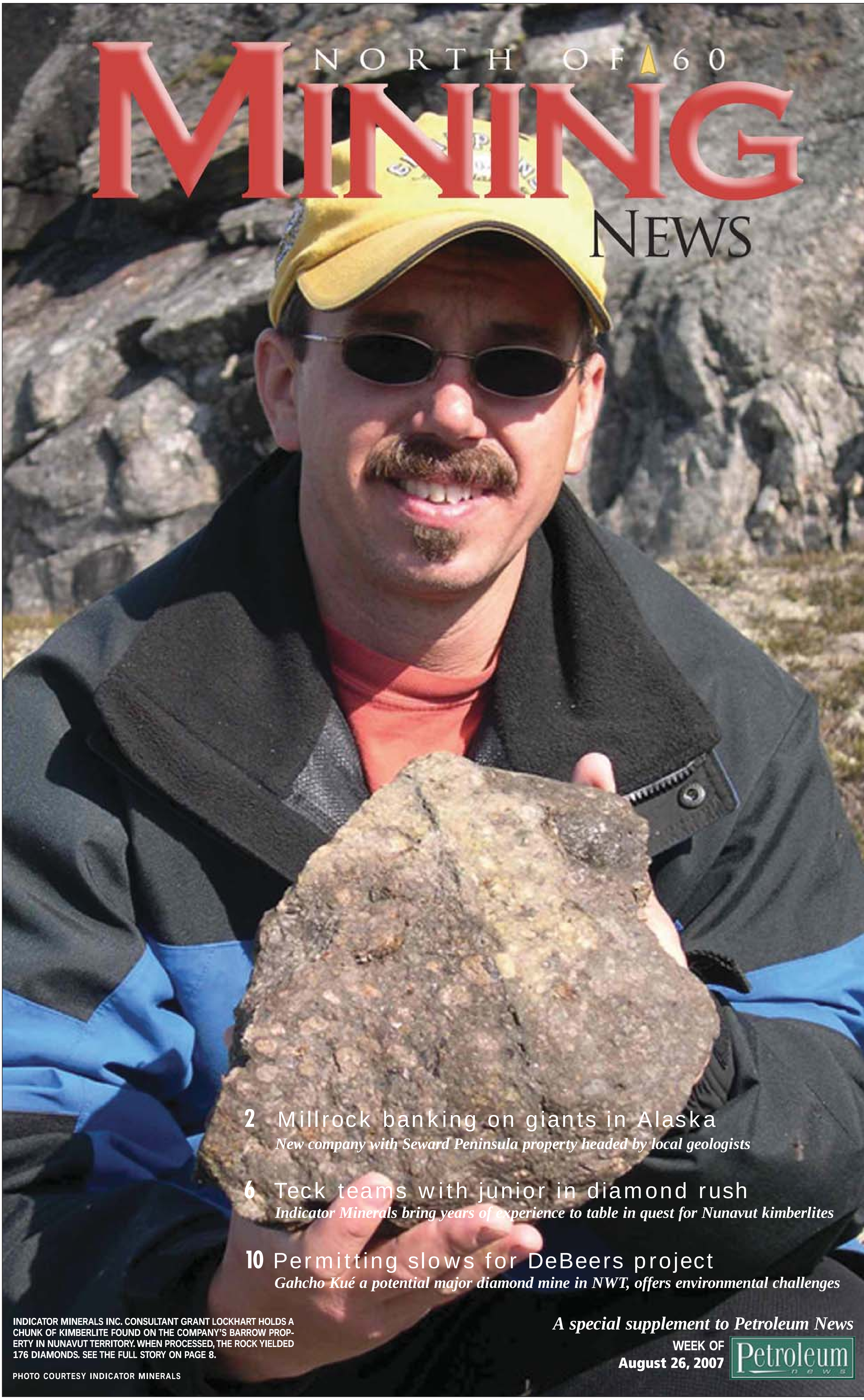
LOOKING FOR GREAT PEOPLE?
At NMS Employee Leasing, we find the right people to support your business. Our clients are our partners—we'll work together to solve your immediate and long-term human resource needs.
• Check criminal background
• Benefited and non-benefited
• Medical dental and vision
• Workman's Comp
• Background checks
• 401k
• Payroll
• Skill testing
• Drug testing
• Reference checks

NMS Employee Leasing
a division of NANA Management Services
5600 B Street
Anchorage, AK 99518
(907) 273-2430
www.nmsemployeeleasing.com


LYNDEN
When you need to talk to a freight...
Expert!
Chukchi Sea
Hudson Bay
LYNDEN TRANSPORT
LYNDEN INTERNATIONAL
"When you need assistance with your shipping, call a freight expert at Lynden. Whether you need to find the fastest or the least expensive way to move a shipment, a Lynden freight expert can assist you with finding out all your options."
www.shiplynden.com
1-888-596-3361
The Lynden Family of Companies
Innovative Transportation Solutions

NORTH OF 60

MINING NEWS



2 Millrock banking on giants in Alaska
New company with Seward Peninsula property headed by local geologists

6 Teck teams with junior in diamond rush
Indicator Minerals bring years of experience to table in quest for Nunavut kimberlites

10 Permitting slows for DeBeers project
Gahcho Kué a potential major diamond mine in NWT, offers environmental challenges

INDICATOR MINERALS INC. CONSULTANT GRANT LOCKHART HOLDS A CHUNK OF KIMBERLITE FOUND ON THE COMPANY'S BARROW PROPERTY IN NUNAVUT TERRITORY. WHEN PROCESSED, THE ROCK YIELDED 176 DIAMONDS. SEE THE FULL STORY ON PAGE 8.

PHOTO COURTESY INDICATOR MINERALS

A special supplement to Petroleum News

WEEK OF
August 26, 2007

Petroleum news

● ALASKA

Millrock banking on giants in Alaska

New company exploring its first property on the Seward Peninsula is headed by local geologists with big company background

By SARAH HURST
For Mining News

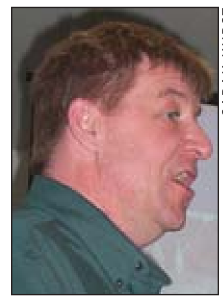
Greg Beischer is a familiar face in Alaska's mining industry, but he's wearing a new hat now. For the past few years he's played a peripheral role, working for Bristol Environmental and Engineering Services, advising parent company Bristol Bay Native Corp. on mineral, oil and gas developments in the Bristol Bay region, including the Pebble project. He's also the outgoing chairman of the Alaska Miners Association's Anchorage branch. This summer Beischer has gone back to breaking rocks in an entirely new job.

Beischer is now president and CEO of Vancouver-based junior Millrock Resources, formerly known as First Factor Developments. As Beischer himself says, First Factor was a shell company that had "something to do with computers," but it was listed on the TSX Venture Exchange, which made it a convenient springboard for conversion into a mining exploration company. The company has recently completed the paperwork for the official change of business and acquired its new name Aug. 14. Beischer, in consultation with partner Philip St. George, another prominent member of Alaska's mining community, chose the name. It is a prospectors' term for a coarse volcanic breccia sometimes containing massive sulfide boulders.

Prospectors recognized that such rocks often occur in very close proximity to valuable deposits of massive sulfide ores. "Though we both like to utilize highly technical, innovative approaches to mineral exploration, Phil and I are practical, prospecting geologists with the ability to recognize the signs and capitalize on our observations. The name seemed to fit well," Beischer said.

Full Metal has optioned Inmachuk property to First Factor

Millrock's creation came about because some Canadian resource sector venture capitalists wanted to start a new mineral development company. Introductions between the financial people and the technical and management group were made by mutual friends and colleagues Rob McLeod and Michael Williams, the management team for Full Metal Minerals. Full Metal is investing heavily in Alaska, but at the same time, actively encouraging others to join the hunt. For the change of business the new company needed a property of its own, so Full Metal agreed to option its Inmachuk property on the north side of the Seward Peninsula to First Factor, which occurred April 4.


SARAH HURST

"When Phil St. George agreed to join me, there was no question. We are a team that will discover and develop ore bodies. "—Greg Beischer, president and CEO, Millrock Resources

"The financiers needed someone with technical and management ability to develop mining projects, and assist with raising venture capital," Beischer explained. "I decided to take a chance; this was a challenge I couldn't pass up. When Phil St. George agreed to join me, there was no question. We are a team that will discover and develop ore bodies. It was a tough decision personally though — I had it pretty darn good with BBNC and Bristol Environmental. These are excellent companies. I think we accomplished a lot, and there are some great people at the company and throughout the region." Beischer will continue to live in Alaska, commuting to Vancouver for seven to 10 days a month. He will continue to consult for Bristol Environmental and Engineering on a much reduced scale in addition to running Millrock.

The 4,338-hectare Inmachuk property is accessible by road — it's 17 miles southwest of the community of Deering — and comprises a sediment-hosted gold prospect and a carbonate-hosted silver-lead-zinc prospect. To earn a 60 percent interest in the property, Millrock must incur US$2.5 million in exploration expenditures (US$335,000 in the first year), issue 600,000 shares (100,000 in the first year), and pay Full Metal $90,000 cash ($25,000 in the first year).

Gold found at Inmachuk in 1900; diamond core holes drilled

Gold placers were discovered on the Inmachuk River and some of its tributaries in 1900. State of Alaska historical production records report that the Fairhaven-Inmachuk district produced 348,089 ounces of placer gold from 1909 to 2002. No systematic lode gold exploration had been conducted in the district until work done by Gold Fields in 2002, resulting in the discovery of a 1,800-meter-long, northwest-trending Au-As-Sb soil anomaly, according to Full Metal's Web site.

In 1966, Bunker Hill Mining completed 15 diamond core holes at Inmachuk totaling 608 meters. Due to an underpowered drill rig, the deepest hole was only 75 meters deep and the targets at depth remained untested. Work completed by Full Metal in 2006 identified a 1,100-meter by 400-meter, northwest-trending silver-lead-zinc anomaly between Harry's Creek and Hannum Creek. Lead values reached a range from trace to 4,220 parts per million, with zinc values ranging from trace to 5,390 parts per million.

This summer Millrock has been clearing the airstrip at Inmachuk, as it was badly overgrown. A drill rig will soon be mobilized for a three-week drill program. "We will drill the anomalous structure on broadly spaced centers. We are targeting large-scale deposits, and the program will give us a very good indication whether or not a large massive sulfide deposit is present at the site," Beischer said. The near-surface mineralization that was drilled by Bunker Hill is very strongly oxidized, according to Beischer, and because of that the historical results probably do not accurately reflect the true metal content in the ground.

Alaska will be initial focus

Alaska will be Millrock's primary exploration focus, at least initially. The company will be making a number of key property acquisitions over the coming weeks and months, Beischer told Mining News. "But we will also be looking to develop mining projects elsewhere in the continent," he added.

Beischer took the job because of the excitement, he said: "I have an absolute belief in the mineral potential of Alaska; we've just barely scratched the surface — the mining industry here will find many more ore deposits. I think at least one of them has Millrock's name on it. To me that's what it's all about; it's the big hunt."

Recent campaigns and lawsuits against Alaska mining projects don't deter Beischer. "Alaska has got its challenges, but it's nothing that can't be overcome; there's risk everywhere in the world. The rewards here in Alaska are enormous," he said. Millrock will be seeking deposit types that typically fall into the "giant" category, Beischer added — like porphyry copper-gold-molybdenum deposits (Pebble is one of these), or Sedex deposits (the most important source of lead, zinc and barite - the type mined at Red Dog), or Besshi volcanogenic massive sulfide deposits (the undeveloped Windy Craggy deposit in British Columbia is one). In other words, "large tonnage, long-lived mines that big companies will be interested in. But having said that, we'll also be targeting high-grade precious metal deposits that we can put into production ourselves."

Beischer has a big company background, having worked for Inco for many years before he joined BBNC, and so does his partner at Millrock, Phil St. George. St. George formerly worked for Cominco and is best known as the discoverer of the Pebble deposit. He's now Millrock's vice president for exploration. Beischer got experience raising venture capital when he was with Inco, which had a number of joint ventures with juniors, so he would promote the merits of projects to analysts and brokers. He has already raised $1.1 million for Millrock in a private placement. ●

ALASKA

Production slips at state's largest gold mine

Production and sales at the Fort Knox Gold Mine dipped slightly in the first two quarters of 2007.

The mine northeast of Fairbanks produced 176,644 ounces of gold over the first six months of the year for a decline of about 1.5 percent from the same period last year, according to preliminary figures released Aug. 2 by the Toronto-based Kinross Gold Corp., the parent company of Fairbanks Gold Mining Inc., which operates Fort Knox.

The mine earned $63.7 million in revenue in the second quarter of 2007, down 8 percent from the second quarter of 2006, as sales decreased nearly 13 percent from last year.

The mine has sold 169,221 ounces of gold so far this year, a 4.8 percent decline over the same period last year.

The downturn was attributed to declines in production and sales to lower throughput at the mill and lower grade ore.

Fairbanks Gold Mining is expanding into a seventh phase at the mine site and awaits federal permits for a 310-acre heap leaching facility that would use cyanide to economically recover gold dust from exceptionally low grade ore.

The mine received state permits for the facility in early July.

Fort Knox has produced nearly 3.5 million ounces of gold since it went into operation in late 1996.

—THE ASSOCIATED PRESS

GUEST COLUMN

Mining and the Law: Federal mine claim holders to face new challenges

By J.P. TANGEN
Guest Columnist

I want you to tear this article out of the paper and save it. I'll explain why in a minute, but the point is that you will want to refer to it often over the next several months if you have any interest in federal mining claims; and, more to the point, if you have any friends or family who have an interest in federal mining claims and have not seen this article, you will want to show it to them.

The reason? Pending in Congress as we speak is legislation that, if it becomes law, will make exploration and mining on (BLM) public domain and U.S. Forest Service lands so difficult that it will be impossible for anyone to mine on them in the future. The legislation I speak of is H.R. 2262, now pending before the U.S. House Committee on Natural Resources. This bill was introduced by Rep. Nick Rahall, D-W.Va. Rahall has been seeking to "reform" the mining law of 1872 for decades, and now he has the votes to do it.

Alaska's Congressman Don Young has been quoted as saying that he lacks the votes to amend or block this bill in the House; Sen. Larry Craig, R-Idaho, is alleged to have said that he doesn't have 41 votes to stop it in the Senate; and it is not at all clear that the White House would veto such a bill, especially if the votes to override are there.

Before detailing exactly what is wrong with H.R. 2262, let me say that I usually am optimistic about the future. If one hangs around with miners long enough, it becomes an occupational hazard. No one I have spoken with, however, has yet to identify even a faint glimmer of hope with regard to this legislation.

Six problems with Rahall bill

So what is wrong with the Rahall bill? Six things: First, it will do away forever with the possibility of getting a patent. This probably is not a big deal, because it hasn't been possible to get a patent for the past 13 years anyway due to the moratorium that has been attached to every Interior appropriation bill that has passed since 1994.

Next, it will impose a royalty on mining operations. Some people could argue that a royalty is appropriate; however this one is 8 percent of the gross value of the metal produced, without credits or deductions for any costs whatsoever. It is analogous to taxing a bank on deposits.

Third, the bill has a provision that would make "Special Places" off limits

Mining & the law

J.P. TANGEN

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

to mining. This wouldn't be a bad thing, except for the fact that anyone can nominate just about anywhere as a special place, which means that when you apply for a permit and disclose where you want to explore, anyone — everyone — who wants to can claim that place is "special" too. If the environmentalists don't find a given place special, competitors just might.

Fourth, there is a civil litigation provision in the bill that make it possible for anyone — citizenship not required — to initiate litigation against anyone for allegedly violating the permit requirements. Fifth, there are criminal provisions — up to $50,000 and two years in jail — for engaging in "mineral activities" without a permit. Mineral activities include, by definition, "any activity ... incidental ... to mineral exploration."

The biggest section, however, relates to the requirement for a permit. Under the Rahall bill, "no person may engage in mineral activities (on federal lands) unless ... a permit was issued to such person under this (act)." In order to apply for a permit, even for exploration, it is necessary that all other permits required by law have been issued. The application must contain site characterization data, an operations plan, a reclamation plan, monitoring plans, long-term maintenance plans, and unspecified documentation as necessary to ensure compliance with environmental requirements.

Minimum for application is information in 21 categories

The application must, "at a minimum," contain information in 21 specific categories including (but not limited to): whether any agent of any sister company has violated any environmental laws anywhere in the United States in the past five years; "accurate" maps clearly showing watersheds, surface and mineral ownership, soils and vegetation, etc., etc., etc.; a description of the biological resources associated with the area; a

Pending in Congress as we speak is legislation that, if it becomes law, will make exploration and mining on (BLM) public domain and U.S. Forest Service lands so difficult that it will be impossible for anyone to mine on them in the future.

description of the plan to keep all facilities in a condition that is not harmful to fish and wildlife; an analysis of the potential hydrologic consequences of the proposed mineral activities with respect to surface and ground water systems using non-proprietary models approved by the secretary; accident contingency plans; environmental baseline data; evidence of financial surety; a description of site security provisions; a "full characterization" of soils and geology; a copy of the applicant's public notice that it is applying for a permit; and much more.

After considering all comments from the public on the application, the secretary must make 10 detailed findings of fact. It is then within his discretion as to whether to issue a permit and, if he does, the permit is good for 10 years (renewable).

There is much, much more in H.R. 2262, but the cost of compliance with these provisions alone will be overwhelming. Even existing operations must satisfy these requirements within three years following enactment of the law.

A hearing was held in Washington on the bill on July 26 and, speaking for the National Mining Association, William Champion, president and CEO of Kennecott Utah Copper Corp., in response to questions by the committee, indicated that if this bill were to pass as drafted, his company would have to consider relocating offshore.

After another hearing in Elko, Nevada, on Aug. 21 the bill is expected to pass out of the committee and onto the House floor. Proponents of this so-called "reform" are hoping for it to be passed by the House before the end of the year.

I fear this draft legislation is unlikely to get widespread coverage in the major newspapers across the country and undoubtedly it will come as a surprise to many federal claimholders. Accordingly, once again, I recommend that you tear this article out of the paper and share it with everyone who needs to know. Enactment of this bill, as drafted, will be the end of mining on public lands in the United States. ●

Contact North of 60 Mining News:

Editor: Sarah Hurst editor@MiningNewsNorth.com
Phone: 907.248.1150 • Fax: 907.522.9583
Address: P.O. Box 231651, Anchorage, AK 99523

Petroleum news

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

Kay Cashman	PUBLISHER
Mary Mack	CHIEF FINANCIAL OFFICER
Kristen Nelson	EDITOR-IN-CHIEF
Sarah Hurst	EDITOR (Contractor)
Susan Crane	ADVERTISING DIRECTOR
Amy Spittler	ASSOCIATE PUBLISHER
Heather Yates	OFFICE MANAGER
Shane Lasley	CIRCULATION DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Curt Freeman	COLUMNIST
Gary Park	CONTRIBUTING WRITER (CANADA)
Allen Baker	CONTRIBUTING WRITER
Rose Ragsdale	CONTRIBUTING WRITER
Tim Kikta	COPY EDITOR
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Mapmakers Alaska	CARTOGRAPHY
Dee Cashman	CIRCULATION REPRESENTATIVE

ADDRESS
P.O. Box 231651
Anchorage, AK 99523-1651

EDITORIAL
Anchorage
907.522.9469
Canada
farnorth@petroleumnews.com

BOOKKEEPING & CIRCULATION
907.522.9469
Circulation Email
circulation@petroleumnews.com

ADVERTISING
907.770.5592
Advertising Email
scrane@petroleumnews.com

CLASSIFIEDS
907.644.4444

FAX FOR ALL DEPARTMENTS
907.522.9583

Several of the individuals listed above are independent contractors

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

egli air haul INC.
Serving Alaska since 1982

Mountain Work • Sling Load Operations
Crew Haul • Aerial Survey
Aerial Filming • Offshore Operations

Ph: 907-246-3554 Fax: 907-246-3654
Web: www.egliair.com

● NUNAVUT

Jericho nets higher grades during tests

No profits yet for beleaguered Tahera, but latest upgrades should enable Nunavut diamond mine to increase throughput soon

By SARAH HURST
For Mining News

Nunavut's first diamond mine, Jericho, operated by Toronto-based Tahera Diamond Corp., is still undergoing technical improvements aimed at increasing output and turning losses into profits. The value of the mine's production for the second quarter of 2007 was US$6.4 million, for a total cash operating cost of $16 million, Tahera said in a release Aug. 7. Jericho processed 95,500 metric tons of ore in Q2 at an average grade of 0.78 carats per ton, resulting in production of 74,000 carats.

Overall, total tons processed at Jericho decreased by 42 percent compared to the first quarter, mainly due to the plant testing that was completed during the second quarter, Tahera said. The grade increased by 73 percent compared with the first quarter, as a result of upgrades to the plant and an improved mix of material. Screen panels were reduced from 1.25 millimeter apertures to 1 millimeter to capture smaller stones. Mining efforts focused on waste stripping, resulting in the exposure of the 430-meter bench level.

1,500 tons per day

Tahera also conducted audits on its existing processed kimberlite, and 13,455 tons of material yielded 3,170 carats, for a grade of 0.236 carats per ton. These fairly small diamonds were valued at about $38 per carat. "Having carats in your tailings means that it's a processing issue and that we can remedy that and collect those tails and generate revenue on the margin," Peter Gillin, Tahera's chairman and CEO, said in a conference call Aug. 8.

Throughput at Jericho in the second quarter was approximately 1,500 tons per day, and Tahera hopes to increase it to 2,000 tons per day over the next few months. "We intentionally scaled back the throughput in order to conduct these tests ... so we didn't have the overall tonnage in the quarter that we had anticipated," Gillin said. "Clearly this is not where we want to be. ... We are now going to slowly elevate the throughput in order to ideally maintain the grade output, therefore ultimately increase the cash flow by way of doing that."

Tahera recently appointed Michael Johnson as interim director of operations at Jericho. Johnson has been involved with the exploration and data analysis of the Jericho kimberlite for the past nine years, including contributing to the development of the feasibility study, and has been Tahera's exploration manager since 2002. ●

● BRITISH COLUMBIA

Polaris builds on quarry's early success

Now that company's first project on Vancouver Island is in production, there's time to think about developing a second one

By SARAH HURST
For Mining News

Almost six months after the Orca quarry on Vancouver Island, British Columbia, began production of sand and gravel, owner Polaris Minerals is looking back with pride on its early achievements and looking forward to an expansion of operations in the future. The quarry is on schedule to start seeing positive cash flow after its first year in production, Vancouver-based Polaris's management said in a second-quarter results conference call Aug. 17.

"The Orca quarry continues to perform extremely well and productivity is improving progressively, all according to plan," said Polaris's president and CEO, Marco Romero. "Product quality has been excellent and we are gradually building a reputation for this in the marketplace as customers become familiar with the unique characteristics of the Orca quarry products." The quarry has processed over 700,000 tons of aggregate since start-up and more than 90,000 man-hours have been worked there with no lost-time accidents.

Polaris is now a supplier to the San Francisco-Oakland Bay bridge, which is undergoing a replacement of its eastern span that is due to be completed in 2013. "This extraordinarily sophisticated structure is by any measure a world-class project where our excellent product quality is being showcased," Romero said. "We anticipate a great deal more infrastructure-related demand in the coming years."

Eagle Rock quarry under study

Polaris has recently resumed work on the feasibility study for its proposed Eagle Rock granite quarry, also on Vancouver Island, Romero added. "We remain confident that Eagle Rock will also one day become a major supplier of high-quality aggregates, focusing predominantly on the road construction business," he said.

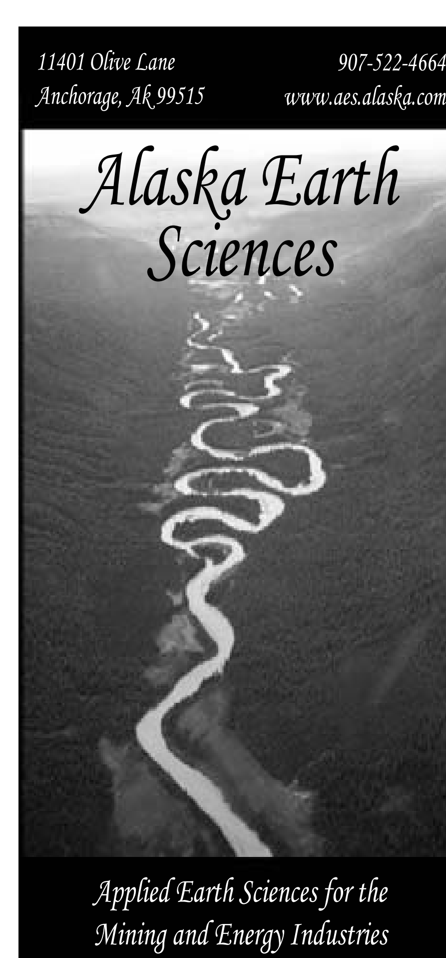
The company's sales for the second quarter totaled US$4.4 million. A loss of $1.2 million was incurred for the quarter, compared to a loss of $100,000 in the same period last year. The cost of pilots and tugs has been higher than originally estimated for three reasons, Polaris's COO, Herb Wilson, said in the conference call. "Firstly, the world shipping market has changed dramatically since our project was developed, thanks to the growth of the Chinese and Indian markets, and tugs are no longer so readily available. Secondly, tug fuel costs have increased substantially. And lastly, the provision of pilots, which is compulsory in British Columbia, is affected by timing windows imposed by the federal responsible agency."

Locally based tug planned

Polaris plans to address these issues through the provision of a locally based berthing tug, which will reduce hours traveled and fuel consumed, and the company also anticipates some eventual relaxation of the pilotage restrictions, Wilson said. "An increase in the number of vessels loaded as sales ramp up will also have a positive benefit," he added.

Orca has solved its problem of needing additional process water storage, as storage capacity on site was increased from around 55,000 gallons to 125,000 gallons in July, Wilson said. "In addition, a third borehole has just been drilled, which has proved to be very productive, but for now we're simply holding it in reserve," he added.

Construction of Polaris' terminal at the Port of Richmond, Calif., is continuing, and is due to be completed at the end of the third quarter. "The large storage building is essentially complete, and installation of the material handling components is advancing rapidly," Wilson said. "We have incurred a small increase in capital costs; it's less than $1 million, but we do anticipate that the overall terminal development will remain within our original cash plan, as we anticipate an offsetting reduction in California sales and use taxes." ●



● ALASKA

Anglo American to steer Pebble project

Northern Dynasty talked to several majors and has already attracted investment from Rio Tinto; new deal is worth $1.4 billion

By SARAH HURST
For Mining News

Like a magnet, Pebble's inferred resources of 42.9 billion pounds of copper, 39.6 million ounces of gold and 2.7 million pounds of molybdenum attracted Anglo American to the southwest Alaska project. What this adds up to is a potential mine life of 50 years or more, which was Pebble's biggest draw for the London-based major, representatives of the company told Mining News. In late July Anglo emerged as a 50-50 partner in Pebble with Vancouver-based Northern Dynasty, promising an investment of $1.4 billion.

Unwilling to succumb to any promotional hype, Anglo spent about 18 months doing its due diligence before agreeing to the deal. "We certainly wanted to find out about the project itself, to see if it fitted the criteria that we were looking for; the way the project was being developed, and the challenges and issues we might face," said Paul Henry, vice president for sustainable development in Anglo's base metals division.

"We wanted to know that the fundamentals of the reserve are there, factors that will influence the design, the metallurgy, the social and environmental issues, the whole gamut," added Terry Burgess, head of business development in the base metals division. After signing a confidentiality agreement, Anglo had open access to Northern Dynasty's data room to scrutinize its drill results and environmental studies.

Management team not yet set

Henry will move to Alaska to join the new company that's being formed to develop the Pebble project. Its management team hasn't been determined yet, but both Anglo and Northern Dynasty will nominate candidates, Henry said. One person who will be less involved is Northern Dynasty's chief operating officer, Bruce Jenkins, who has headed the project for the past few years. He will be working for Northern Dynasty's parent company, Hunter Dickinson, in Vancouver, according to the company's stakeholder relations manager, Heidi Franklin.

> *"We don't really have the full knowledge and experience yet of the concerns of the people; these are things we really need to listen to."*
> **—Paul Henry, vice president for sustainable development in Anglo's base metals division**

The high-profile campaign against Pebble, which includes regular TV, radio and newspaper ads, and even ads on the sides of Anchorage buses, is something that Anglo has yet to experience here, although, like all mining companies, it constantly faces opposition to projects all over the world. "We don't really have the full knowledge and experience yet of the concerns of the people, these are things we really need to listen to," Henry said. "I think one of the advantages of being in the U.S. and being in Alaska is that there is a set process that you need to go through with regard to permits," he added.

Anglo's only other recent foray into Alaska was its exploration at the MAN nickel-copper-platinum project between Anchorage and Fairbanks, which is now wholly owned by Toronto-based junior Pure Nickel. But Anglo does have experience in far northern climates, as it is part of the same conglomerate as the De Beers diamond division. De Beers is due to bring its Snap Lake mine into production later this year and is also hoping to develop the Gahcho Kué mine, both of which are in Canada's Northwest Territories.

Focus will be on completing pre-feasibility by end of '08

The new company that oversees Pebble will focus on completing a pre-feasibility study by December 2008, then a feasibility study by 2011, with commencement of commercial production tentatively scheduled for 2015. "We are excited to be initiating operations in the State of Alaska, a jurisdiction known around the world for the responsible development of its natural resources," said Cynthia Carroll, Anglo's CEO. "We also look forward to working closely with the people of Alaska, and, in particular, the communities of the Bristol Bay area and Kenai Peninsula to maximize the value of these resources for all stakeholders, taking into account the positive long-term demand prospects for copper."

"We have sought a partner that shares our approach to development, has the ability to finance, and is an experienced mine operator," said Ron Thiessen, Northern Dynasty's president and CEO. "Anglo brings commitment and depth in all of these key areas. Our shared goal is to develop a state-of-the-art operation with a high annual metal production profile that will bring direct benefits to the local communities, as well as being a catalyst for sustainable economic development in the region and across the state."

In its interim results statement for 2007, released Aug. 3, Anglo announced record underlying earnings of $3.1 billion, up 22 percent, and an additional $4 billion capital return. On the other hand, the company described its own safety performance as "unacceptable," particularly in the platinum division. Additional safety measures have been put in place at the Rustenburg platinum mines in South Africa, where at least 12 workers have died this year. Since taking the helm in March, Carroll has pledged to improve the company's safety record. ●

● YUKON

Private company takes on Yukon gold mine

Government dealt with environmental cleanup at Mt. Nansen property after owner was convicted of violating terms of water license

By SARAH HURST
For Mining News

Mining assets in the Yukon that formerly belonged to bankrupt company BYG Natural Resources have been sold to a privately held company, Saskatchewan Ltd., for $3.1 million. Ontario-based BYG's interim receiver, PricewaterhouseCoopers, announced the sale Aug. 9. The 199 claims and leases at the Mount Nansen property near Carmacks had been under the joint care of the governments of Yukon and Canada.

Saskatchewan Ltd says it intends to begin developing an exploration program for the Mount Nansen site. The Vancouver-based company holds 74,000 hectares of prospective uranium claims in the Athabasca basin, Saskatchewan.

BYG operated an open pit gold-silver mine at Mount Nansen from 1996 to 1999. As related in Yukon Supreme Court documents, BYG began to violate the terms of its water license almost immediately. BYG ceased operations in February 1999 when ordered to do so by the Canadian government for failing to follow directions to remedy its environmental problems and water license violations.

Judge Heino Lilles of the Yukon Territorial Court convicted BYG on three criminal charges for violation of its water license. He noted that the company failed to administer a simple treatment to stabilize the arsenic levels in its tailings pond; used faulty materials to build its tailing pond dam which allowed seepage to weaken the dam by erosion; improperly constructed the ditches that surrounded the tailings pond; constructed the tailings pond haphazardly and without proper plans or supervision; and failed to assign one person to ensure compliance with its water license.

> *Saskatchewan Ltd says it intends to begin developing an exploration program for the Mount Nansen site. The Vancouver-based company holds 74,000 hectares of prospective uranium claims in the Athabasca basin, Saskatchewan.*

Water licenses violated

"The above examples demonstrate an attitude consistent with 'raping and pillaging' the resources of the Yukon, with little consideration for the detailed conditions of the water licenses granted to BYG," Judge Lilles wrote. "Keeping in mind the dangerous and toxic materials involved — heavy metals such as copper and zinc and deadly chemicals such as arsenic and cyanide — the level of care or diligence reasonably expected from BYG greatly exceeded what the company provided."

Judge Lilles also described BYG as "inept, bumbling, amateurish and possibly negligent." He imposed the maximum fine of $100,000 on each count, and expressed the opinion that the legislation should be amended to permit the imposition of fines and imprisonment on senior officers and managers of the company. It has been estimated that the environmental cleanup costs in this case could be as high as $23 million.

Coincidentally, at almost the same time as the sale of BYG's assets was announced, in early August, the Yukon Water Board issued a water license to a company led by BYG's former president, Graham Dickson. He is now president and CEO of Vancouver-based Yukon-Nevada Gold, which wants to reopen the abandoned Ketza River gold mine near Ross River. The company will have to put up a $3 million reclamation bond for the project, and it will clean up what was left behind by the previous owners. ●

Pacific Rim Geological Consulting, Inc.

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

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

Thomas K. Bundtzen, President

FOUNDEX

Global Drilling Solutions

- Geotechnical Site Investigations
- Offshore Drilling Specialists
- Gravel, Placer Exploration
- Large Diameter Bulk Sampling
- Grouting, Anchoring & Piling
- 3" to 24" Water Wells
- Ground Improvement
- Wireline Coring NQ3 to PQ3
- Wireline CPT & Vane Testing
- In-situ Testing & Instruments
- Heli-portable Drilling Systems
- Wide Range of Equipment
- Highly Experienced Staff

Anchorage, Alaska
Phone 907-522-8263
Fax 907-522-8262
HGrey@Foundex.com
www.Foundex.com
Surrey BC Canada
604-594-8333

1972 — 2007
35
Years of Excellence

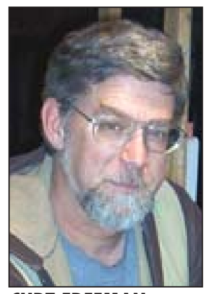
GUEST COLUMN

Alaska Mining News Summary: 'Holy Cow!' Explosion of activity across state

By CURT FREEMAN
For Petroleum News

As the late, great Phil Rizutto used to say when something amazing happened on the baseball field: "Holy Cow!" The last month has seen an explosion of activity across Alaska with companies working in virtually every region on a diverse package of metals including gold, platinum group elements, silver, molybdenum, lead, zinc, copper and nickel. Several new companies have entered the exploration field in Alaska and several new partners have joined forces with previously active companies to advance Alaska mineral properties.

The author


CURT FREEMAN

The author Curt Freeman, CPG #6901, is a well-known geologist who lives in Fairbanks. He prepared this column Aug. 20. Freeman can be reached by mail at P.O. Box 80268, Fairbanks, AK 99708. His work phone number at Avalon Development is (907) 457-5159 and his fax is (907) 455-8069. His email is avalon@alaska.net and his web site is www.avalonalaska.com.

Western Alaska

The biggest news of the month was the joint venture between **NORTHERN DYNASTY** and **ANGLO AMERICAN** plc for development of the Pebble project. Under terms of the deal Anglo can become a 50 percent partner in Pebble by making staged cash investments of $1.425 billion. Anglo's staged investment includes a committed expenditure of $125 million to complete a pre-feasibility study targeted at the end of 2008. After the completion of the pre-feasibility study, Anglo must elect to commit to a further $325 million for a feasibility study, the completion and approval of which is targeted for 2011.

Upon the decision to develop a mine, Anglo must elect to commit to the next $975 million of expenditures to retain its 50 percent interest, completion of which will meet the $1.425 billion requirement. Thereafter, any further expenditure will be funded on a 50-50 basis. If the feasibility study is completed after 2011, Anglo's overall funding requirement increases to $1.5 billion.

Northern Dynasty will assess its 50 percent share of any project debt financing when a production decision is made.

Not sure about this but I think the $1.425 billion earn-in is the largest joint venture earn-in amount in Alaska mining history. Anybody out there know if this is the case?

ST. ANDREW GOLDFIELDS has posted second-quarter production results from its Nixon Fork gold-copper mine near McGrath. In the second quarter the mine processed 7,433 tonnes of ore with a head grade of 16.0 grams of gold per tonne.

Mill recovery rate for the quarter averaged 70.5 percent producing 2,661 ounces of gold. The company also sold 258 tonnes of copper concentrate from which it received $2.7 million.

Mine development scheduled for completion in the second quarter fell behind schedule due to equipment and mining personnel shortages and ore-face availability issues encountered at the upper portion of the Crystal deposit. The company believes it has rectified the issue by revising its mine plan to accelerate the development of the lower portion of the deposit and by hiring a mining contractor to solve labor shortage issues.

The company plans to shut down the mill for about six weeks in August and September to allow for the planned installation of tailings filtration equipment and the integration of the dry stack tailings facility at the mine. Mining and development operations will continue and ore will be stockpiled at the mill.

NPN INVESTMENT GROUP signed a letter of intent with **MILLROCK RESOURCES CORP.** to joint venture the company's recently acquired Divide gold property on the Seward Peninsula. Millrock can earn a 50 percent interest by paying one half of NPN's obligations under its current option with the property owner. Millrock will make payments to NPN totaling $500,000 and issue 500,000 common shares of Millrock over the next 4 years.

ANDOVER VENTURES INC. said ground work is under way on both the KUY and Kamishak properties on the Alaska Peninsula. Andover has completed induced-polarization ground geophysics at its KUY gold prospect and at the Kamishak copper-gold project under option from Full Metal Minerals. Additional work is planned for this year at both prospects.

Andover Ventures also said drilling has begun at its Bulk Gold project near Nome. The 2007 drill program is scheduled to drill approximately 2,000 feet of core in five holes. The holes are planned to drill test the plus-5,000 foot long Dorothy Creek soil anomaly, the downdip extension of the historic Hed & Strand lode gold-antimony mine, the Antimony Dome geophysical and geochemical anomaly and the down dip extension of the Big Pig target.

Alaska newcomer **GREAT BASIN GOLD LTD.** has signed a letter of intent with Talkeetna-based **CLARK/WILTZ MINING** to earn an 80 percent interest in the Ganes Creek property in the Ophir District. Pursuant to the agreement, a minimum of $800,000 in exploration expenditures is required in 2007 followed by an additional $1million by the end of 2008 and a final $1.2 million in expenditures by the end of 2009.

GREAT BASIN GOLD can also increase its interest in the property at a production decision by purchasing the remaining 20 percent at fair market value should Clark/Wiltz Mining not wish to participate in any development costs. Clark/Wiltz Mining would retain a 2 percent NSR of which 1 percent could be purchased by Great Basin Gold for $2 million. Welcome to Alaska Great Basin Gold!

NPN Investment Group has entered into an option agreement with Andover Ventures on the latter's Alaska Peninsula project. The project, on lands owned by **BRISTOL BAY NATIVE CORP.**, includes the KUY, Fog Lake, Kemuk, Chilikat East, Chilikat West, Koksetna and Samuelsen prospects. Under terms of the agreement, NPN can earn a 50 percent interest spending a total of $3.5 million over a period of 4 years plus pay $1 million NPN shares to Andover over the same period.

FULL METAL MINERALS has optioned its Moore Creek gold project to Alaska newcomer **HIGHBURY PROJECTS INC.** Highbury can earn a 60 percent interest in the property by incurring $2.1 million in exploration expenditures, issuing 50,000 shares, and paying Full Metal $60,000 cash.

The companies will complete a surface trenching and airborne geophysical program during the summer of 2007. Welcome to Alaska Highbury Projects Inc!

TONOGOLD RESOURCES INC. announced results from a coarse gold study conducted on 2006 drill samples at its Nyac gold project. Comparison of coarse and fine gold fractions from drill core assays at Bonanza Ridge indicated that the coarse fraction increased with depth. Gold content in the coarse fraction ranged from 0.3 to 137 parts-per-million gold, while total gold content in the anomalous intervals ranged from 0.3 to 8.2 parts-per-million gold. Coarse gold occurs over at least 250 vertical meters within the southeastern half of the Bonanza soil anomaly where all of the 2006 drilling occurred.

PACIFIC NORTH WEST CAPITAL and joint venture partner Stillwater Mining said numerous shallow soil and deep auger overburden samples have been taken in the Red Mountain and Susie Mountain target areas at their Goodnews Bay platinum project. This sampling program will be largely completed by the end of August. Promising new chromite occurrences have been located in the Red Mountain area. Assays are pending.

Eastern Interior

KINROSS GOLD announced second-quarter results from the Fort Knox mine near Fairbanks. The mine produced 93,930 ounces of gold at a cost of $320 per ounce. Production decreased 6 percent in the second quarter of 2007 when compared to the same period in 2006 as a result of fewer tonnes being processed and lower grades, partially offset by slightly higher recoveries.

Several new companies have entered the exploration field in Alaska and several new partners have joined forces with previously active companies to advance Alaska mineral properties.

During the quarter the mill processed 3,323,000 tonnes of ore grading 1.01 grams of gold per tonne. Gold recovery averaged 87 percent. The company is advancing two projects at Fort Knox, the Phase 7 pit expansion and the valley leach project. It is expected that feasibilities will be completed on both of these projects by the end of 2007. The mine has secured all necessary state permits and is awaiting the federal permit for the valley leach project.

FREEGOLD VENTURES LTD. announced additional drilling results from the Beistline prospect area at its Golden Summit project. Highlights include 15 feet averaging 16.13 grams of gold per tonne in hole 447; 78 feet averaging 1.52 grams of gold per tonne in hole 450; 27 feet averaging 4.17 grams of gold per tonne in hole 451; and 3 feet grading 34.8 grams of gold per tonne in hole 456.

Recent drilling has identified four parallel east-west trending structures over a width of 175 feet. Two of the structures have been traced over a strike length of 860 feet and remain open in both directions. Significant gold mineralization has also been intersected between the first two structures in the form of ladder structures.

RIMFIRE MINERALS CORP. and joint venture partner **RUBICON MINERALS CORP.** said a four-hole, 975 meter drilling program at its Goodpaster project has intersected a 7.4 meter-wide gold-bearing zone of quartz veining at the California North prospect. Hole CN07-01 was drilled to test the California North gold and arsenic soil geochemical anomaly. Quartz vein mineralization was intersected at a depth of 72.6 meters and averaged 1.2 grams of gold per tonne over a 7.4 meter width including 2.5 meters averaging 2.2 grams of gold per tonne.

At least one additional hole is planned for the target in 2007 to determine the true thickness and orientation of the vein. Drilling is planned to commence in mid-August. Soil sampling at the Cal-Surf, Eagle and Swede properties returned anomalous gold and pathfinder element geochemistry in soil samples. Additional work has been recommended for these areas.

RUBICON MINERALS CORP. announced additional results from its New Horizon gold project in the Goodpaster District. Surface follow-up work and reconnaissance diamond drilling is being conducted in the area of the Maple Leaf showings. Results are pending.

Recent surface prospecting has iden-

see FREEMAN page 7

THE PROBLEM SOLVERS
THE ALASKA REGIONAL COUNCIL OF CARPENTERS

BUILDING ALASKA

FAIRBANKS CARPENTERS LOCAL 1243
ANCHORAGE CARPENTERS LOCAL 1281
SOUTHEAST CARPENTERS LOCAL 2247
ALASKA MILLWRIGHTS & MACHINE ERECTORS LOCAL 1501
ALASKA PILEDRIVERS & DIVERS LOCAL 2520

WWW.UBCALASKA.ORG

continued from page 6

FREEMAN

tified new mineralized areas at the American Eagle and Tourmaline Ridge prospects. At the American Eagle showing, sheeted white quartz veins ranging from 0.1 to 1.0 centimeters thick are hosted in granite. Vein material makes up 5 percent-10 percent of the country rock over an area of 400 by 50 meters.

Quartz veins at American Eagle host extremely course grained bismuthinite in flat, sometimes deformed tabular plates ranging up to 1.0 centimeters in maximum dimensions. The bismuth-bearing veins have not been seen in outcrop and occur on a coarse boulder-strewn talus slope just below a flat ridge line. Limited grab sampling along this ridge has returned gold values ranging from trace to 3.03 grams of gold per tonne, up to 3,880 parts-per-million bismuth, up to 5,610 parts-per-million arsenic and up to 494 parts-per-million molybdenum. The full extent of this mineralization is unknown.

At the Tourmaline Ridge showing the upper 150 meters of elevation on this ridge over an 800 meter length along the ridge crest is composed of tourmaline-bearing sediment-derived gneiss containing massive tourmalinite with lesser quartz veins and tourmaline-vein breccias. Sampling of the tourmaline-rich rocks has returned weakly elevated gold numbers (maximum 164 parts per billion), up to 804 parts-per-million bismuth and up to 2,620 parts-per-million arsenic.

FULL METAL MINERALS announced additional drilling on the LWM polymetallic prospect at its Fortymile project under option from **DOYON LTD.** Significant drilling results include hole LWM07-07, which returned 15.6 meters averaging 21.2 percent zinc, 8.7 percent lead, and 127.0 grams of silver per tonne. Hole LWM07-09 is the deepest intercept of massive sulfide yet encountered on the property, and hosts the highest silver and copper grades yet encountered, with 6.48 meters averaging 464.2 grams of silver per tonne, 31.6 percent zinc, 11.3 percent lead and 1.41 percent copper.

Drilling and ground magnetic geophysics suggests that the carbonate package hosting the massive sulfide mineralization dips to the south and trends to the northeast towards the company's Fish prospect.

Full Metal Minerals also announced initial sample results from its Eva prospect on lands also within the Fortymile project under option from Doyon Ltd. A total of 14 samples were collected from subcrop and historic prospect pits at the Eva Prospect. Individual silver values include 3,730, 1,960 and 1,280 grams of silver per tonne.

All samples of mineralized rock averaged 957 grams of silver per tonne, 23.6 percent zinc, 12.6 percent lead, and 0.9 percent copper. Three samples averaged over 25 percent lead. Samples were collected over a 50 meter by 50 meter area of rubble crop. Mineralization occurs within a marble unit replaced by partially oxidized, coarse-grained massive sphalerite, galena and chalcopyrite.

The company recently discovered an extensive area of partially oxidized sphalerite and galena within a vegetation "kill zone" at the Drumstick prospect within the same marble unit, 2,200 meters north of the Eva prospect. The area between the two prospects is covered by overburden and vegetation. Additional work is planned.

INTERNATIONAL TOWER HILL MINES announced drilling results from its Livengood gold project. The new results confirm the presence of high-grade, "sediment-hosted," disseminated gold mineralization. This new style of mineralization overlies the mineralized lower grade volcanic units which have been the main focus of the exploration in the central target area of the property.

Significant results from the sediment-hosted mineralization include 8.8 meters grading 9.95 grams of gold per tonne and 8.5 meters grading 9.64 grams of gold per tonne in hole MK07-18 which overlies an additional 78.6 meters grading 1.09 grams of gold per tonne hosted in the underlying volcanic sequence.

The new sediment-hosted mineralization is characterized by decalcification, chaotic fracturing, strong oxidation and pervasive silicification. The highest grade parts of these new zones are associated with strong decalcification and commonly contain stibnite. The 2007 Livengood drill plan calls for approximately 8,000 meters of core drilling.

Alaska newcomer Great Basin Gold Ltd. has signed a letter of intent with Talkeetna-based Clark/Wiltz Mining to earn an 80 percent interest in the Ganes Creek property in the Ophir District.

METALLICA RESOURCES announced that it had optioned the Liberty Bell gold project in the Bonnifield District from a private owner. Under terms of the agreement Metallica will invest $2 million in exploration expenditures and deliver a feasibility study by the end of 2011, or incur additional exploration expenditures totaling $5.5 million and deliver a feasibility study by the end of 2015.

Alaska Range

PURE NICKEL INC. has begun its 4,000 meter, $4 million exploration drilling program on its MAN nickel-copper-platinum group element project. Prior to drilling the company completed a 3,327 line-km VTEM B-field system airborne geophysical survey and an extensive geochemical survey on the property. In combination with previous exploration on the property the company has used these new data to establish high priority targets that are the subject of the current drill program.

MAX RESOURCE CORP. announced that drilling has commenced at its Gold Hill molybdenum project in the Valdez Creek District. Previous exploration by other parties returned significant results including hole 77-2 which returned 536 feet grading 0.048 percent molybdenum disulfide starting at surface, with a higher grade interval from 350-500 feet which returned 0.094 percent molybdenum disulfide.

Northern Alaska

SILVERADO GOLD MINES announced that 1,250 ounces of nugget gold (1/4 inch and larger) have been recovered from its Nolan Creek mine since the start of sluicing operations in late June. These nuggets range in size from 1/10 ounce to 12.4 ounces in size.

ANDOVER VENTURES INC. announced the commencement of drilling at its 100 percent owned Sun project on the Ambler Mining District. A second drill rig is expected to arrive shortly and a third rig is expected in August. The drill program will include twinning some of the 49 historic drill holes on the property drilled by **ANACONDA**, **TECK COMINCO** and **NORANDA**.

Southeast Alaska

KENNECOTT (70.3 percent) and **HECLA** (29.7 percent) announced second quarter 2007 production from the Greens Creek mine on Admiralty Island. The cash cost at Greens Creek for the quarter was a negative $3.458 per ounce of silver. The average grade of ore mined during the quarter was 18.19 ounces of silver per ton, up significantly from the 13.73 ounces per tonne mined during the same period in 2006. During the second quarter the mine produced 2,316,256 ounces of silver, 15,126 ounces of gold, 4,833 tons of lead and 13,289 tons of zinc. Total production costs for the quarter were a negative 34 cents per ounce of silver produced, down significantly from the $1.22 per ounce cost of the year previous figures.

Second-quarter exploration emphasis was on definition drilling of the 5250 North extension, where some spectacular intersections have been recorded with intervals exceeding 50 ounces of silver per ton and combined lead and zinc grades of 20 percent. The zone appears continuous throughout the 800 feet of drilled strike length and appears to continue along a shallow-dipping structure to the west.

Alaska newcomer **ALTAIR VENTURES INC.** has entered into an option agreement with Full Metal Minerals pursuant to which Altair has an option to earn up to a 75 percent interest in Full Metal's interest in the CJ gold project on Prince of Wales Island. Under terms of the agreement, Altair may earn a 60 percent interest in the property by making $3.5 million in exploration expenditures, paying an aggregate US$305,000 to Full Metal and land owner **RED DIAMOND MINING** and issuing 1.3 million shares to Full Metal. Exploration work at the CJ property commenced in June and will include structural mapping, soil and rock sampling and a proposed 1,800 meters of core drilling. Welcome to Alaska Altair Ventures Inc.! ●

GPS Environmental, LLC
Industrial/sanitary Water & Wastewater, Portable Modular Camps & Mining Equipment
3340 Arctic Blvd. Ste 102
Anchorage, Alaska 99503
Ph: 907-245-6606
E-fax: 1-928-222-9204
paul@gpsenvironmental.com
bill@gpsenvironmental.com
www.gpsenvironmental.com

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

PEOPLE.
Caring for people; an asset more precious than gold.
ENVIRONMENT.
Leading in environmental stewardship.
PRODUCTION.
Producing gold 24-hours a day, 365 days a year.
WE'VE GOT OUR PRIORITIES STRAIGHT.

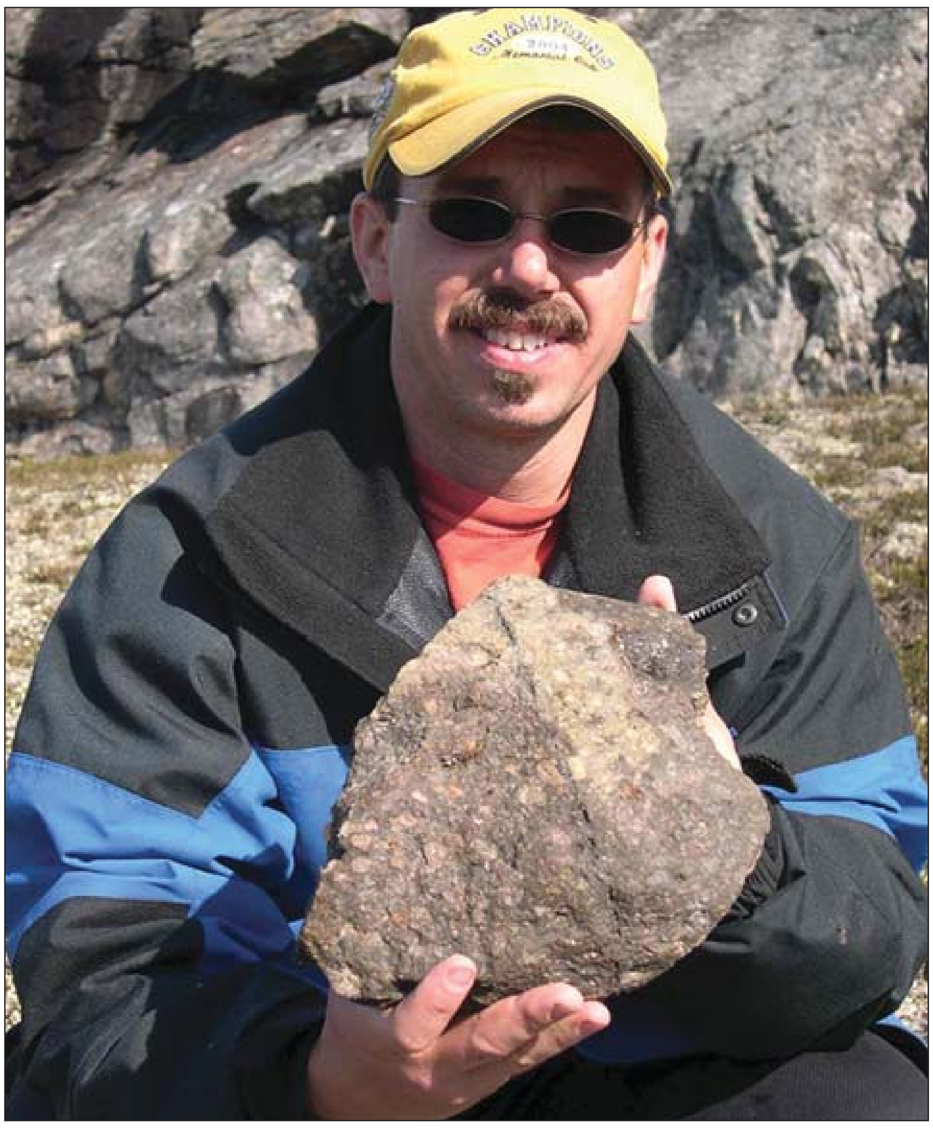
907.488.4653 • WWW.KINROSS.COM
FORT KNOX
Gold Mine • Alaska
A Subsidiary of Kinross Gold Corp.

NUNAVUT

Teck teams with junior in diamond rush

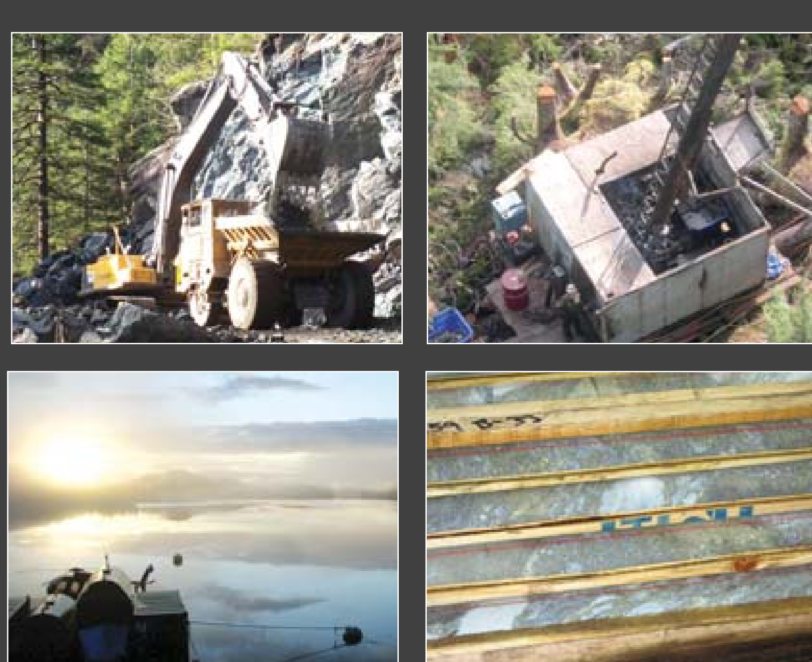
Vancouver's Indicator Minerals brings years of management experience to table in quest for kimberlites in remote Nunavut Territory

COURTESY INDICATOR MINERALS INC.



Indicator Minerals Inc. senior consultant and technical advisor Grant D. Lockhart holds a chunk of kimberlite found in 2006 on the company's Barrow property in Nunavut Territory. When processed, the rock yielded 176 diamonds.

NIBLACK



Niblack Mining Corp. is a team of industry professionals with extensive experience in mineral exploration and venture capital markets. We employ a strategy based on our core competencies of scientific expertise and extensive regional knowledge to explore for massive sulphide targets in southeast Alaska and western North America. Our focus is the one hundred percent owned Niblack volcanogenic massive sulphide (VMS) project that is an advanced stage exploration target on Prince of Wales Island. Our goal is to enhance shareholder value through the successful development of the Niblack property and other prospective targets that we acquire.

For more information on Niblack or the VMS project, please contact us at www.niblackmining.com

By ROSE RAGSDALE

For Mining News

Indicator Minerals Inc. is that most fortunate of Canadian junior exploration companies, one with a prospect so enticing that a major has signed on to do some heavy lifting.

The three-year-old Vancouver, British Columbia-based venture is well into its third season of exploration, poring over more than 4 million acres of mineral claims in the Far North's Nunavut Territory in search of Canada's next big diamond discovery.

Indicator's most promising prospect to date is the Darby property, located on nearly 700,000 acres of claims about 72 miles southwest of Kugaaruk, Nunavut. In 2004, the junior acquired an 80 percent interest in Darby from well-known diamond seekers Hunter Exploration Group, which retained a 20 percent share.

Indicator Minerals President and CEO Bruce Counts said the Darby claims as well as another Nunavut prospect that the junior purchased called Barrow looked more compelling than most in Hunter Exploration's sizable inventory and had good mineral chemistry.

Airborne geophysical surveys of both properties revealed significant signs of kimberlite, the rock formations that sometimes contain diamonds.

Last year, Indicator identified a field of kimberlites in the Darby property and took samples from five kimberlites. The company also said it counted 95 kimberlite floats, or rock fragments that could contain diamonds, at Darby. One kimberlite, in fact, has a surface area of some 28 acres, Counts said in an interview Aug. 20.

"It's pretty clear to us that there are more kimberlites there. Where you find one, you're going to find more," Counts said.

But not all kimberlites contain diamonds and not all diamond-bearing kimberlites are economic — one in 25 contains diamonds and one in 250 is economic, according to Indicator Minerals.

Exploration a challenge

"The challenge," said Counts, "is to find the one kimberlite in the field that's economic."

And Counts' opinion should count. He and other senior managers at Indicators Minerals are veterans of Canada's recent diamond rush.

A geophysicist by training, Counts worked for BHP Minerals Canada Ltd. in the 1990s, and was an integral member of the team responsible for the discovery and development of the huge Ekati Diamond Mine in the Northwest Territories. Ekati is Canada's first producing diamond mine.

Geologist Dave Kelsch, Indicator's vice president of exploration, played an integral role in the discovery and development of kimberlites that were incorporated into the Diavik Diamond Mine, the other big producing mine in the Northwest Territories.

Grant D. Lockhart, the other technical member of Indicator's management team, also played a key role in the discovery and development of Ekati.

"We're part of the first generation of diamond explorers in Canada," said Counts. In all, Indicator has nine employees, and most of them worked on earlier diamond projects.

Today, Canada has three producing diamond mines, two more in construction, and a sixth in the permitting process.

At the Darby property, Teck Cominco Ltd. has agreed to spend $14 million over four years to earn a 51 percent ownership interest in the project. The major also agreed to carry to production the remaining 29 percent interest held by Indicator Minerals on a project-loan basis as well as other considerations.

This year, Teck Cominco has undertaken an $8.5 million exploration program at Darby that is already yielding results.

Indicator Minerals announced Aug. 1 that the first hole drilled as a result of

see **INDICATOR** page 9

COURTESY INDICATOR MINERALS INC.

Diamonds processed from a boulder found by Indicator Minerals Inc. on its Barrow property near Kugaaruk, Nunavut Territory.

COURTESY INDICATOR MINERALS INC.

Dave Kelsch, Indicator Minerals vice president of exploration, poses with core samples taken at the Darby diamond project in Nunavut Territory.

COURTESY INDICATOR MINERALS INC.

A panoramic view of the Barrow Property in Canada's eastern Arctic.

continued from page 8

INDICATOR

Teck's ongoing airborne geophysical survey intercepted kimberlite.

To date, 15 new targets have been tested by drilling in 2007 resulting in three new kimberlites and one lamprophyre being discovered. This brings the total number of kimberlites discovered on the Darby Project to eight. The 16,000-line-kilometer airborne geophysical survey was 90 percent complete Aug. 1, and more than 750 of a possible 1,200 planned heavy mineral samples had been collected. The remaining six to eight weeks of Teck's efforts were to focus on extending the Darby field by prospecting and drilling targets identified in the new airborne area.

"These discoveries reinforce our early belief that the kimberlite field at Darby covers a very large area and that our current land position is strategically positioned within Canada's newest kimberlite field," Counts said in a statement.

Diamond find excites explorers

At Barrow, meanwhile, Indicator Minerals is focusing on collecting more samples to identify targets for a new airborne geophysical survey this fall. The company is also continuing to explore the region, and is quite willing to go elsewhere in the world if an opportunity presents itself, he said.

Last year, a member of the Indicator exploration team found a 40-kilo boulder in a single occurrence sticking out of the ground on the Barrow property that returned 176 diamonds, including five larger stones.

"From an explorer's perspective, you get excited if you find one stone for every kilo of kimberlite," Counts said.

So far, Indicator has identified 11 targets at Barrow, about half of them underwater, which means they will be explored this winter. Six of the targets have the right geophysical anomalies to be the source of that diamond-rich boulder.

Counts said his team will do some prospecting this fall until the drill arrives in December when they will begin taking samples.

Barrow is on 44 mineral claims less than 10 miles from Kugaaruk, formerly known as Pelly Bay, on the shore of the Gulf of Boothia in northeastern Canada. The 113,630-acre property has easy access to a deepwater port, airstrip and other important infrastructure, Counts said.

Barrow's accessibility should greatly improve its economics if a mine is developed on the property.

Counts said he is excited about both Darby and Barrow's prospects for yielding commercial discoveries of diamonds, but he has learned that every exploration venture is different.

"At Ekati, the discovery was as much good luck as it was good science," he said. "You have to keep an open mind, be flexible and use a multidisciplined approach." ●

NovaGold
RESOURCES INC.

Turning Experience and Opportunity Into Gold

AMEX, TSX Symbol: NG

Developing four major projects in Alaska and British Columbia

- Demonstrated commitment to environmental and social sustainability
- Participation Agreements with Native American and First Nations partners at all development-stage projects
- One of the largest reserve and resource bases of any development-stage precious metals company
- Partnership with Teck Cominco to build Galore Creek copper-gold mine
- Low-cost gold production in Alaska in Q3-2007
- Compound annual growth rate of more than 70% over the past seven years
- Valuable and growing company, with significant market revaluation potential as NovaGold approaches production

www.novagold.net 1.866.669.6227 info@novagold.net

● NORTHWEST TERRITORIES

Permitting slows for DeBeers project

Gahcho Kué shows potential for becoming major diamond mine in Northwest Territories; offers significant environmental challenge

By ROSE RAGSDALE
For Mining News

De Beers Canada Inc. is exploring the Gahcho Kué project in the Northwest Territories this summer, hoping to confirm its potential to become the company's second major diamond mine in the Canadian Arctic.

Of the four major mining projects De Beers is developing, two are in Canada, which has emerged in the past 15 years as one of the world's most prospective diamond mining regions.

The two advanced Canadian developments are the Snap Lake Diamond Project in the Northwest Territories and the Victor Diamond Mine Project, in remote northern Ontario.

Snap Lake, expected to be Canada's first underground diamond mine, is nearing completion of construction, with startup of production due by Sept. 30.

At the Victor project, construction is also on target for an accelerated production startup of an open pit diamond mine by mid-2008.

But at Gahcho Kué, about 48 miles southeast of the Snap Lake project and 180 miles northeast of Yellowknife, DeBeers and joint venture partners Mountain Province Diamonds Inc. (44 percent) and Camphor Ventures (4.9 percent) are still in the pre-development and permitting stages of the project.

At least eight diamondiferous kimberlites, along with sills and dykes, have been discovered at the Gahcho Kué property, which formerly was known as Kennady Lake.

Conceptual studies completed in 2000 and 2003 indicated the potential to mine 20 million of the estimated 31 million metric tons of delineated resource of the 5034, Hearne and Tuzo pipes, at a yearly rate of 2 million metric tons.

Permitting, exploration under way

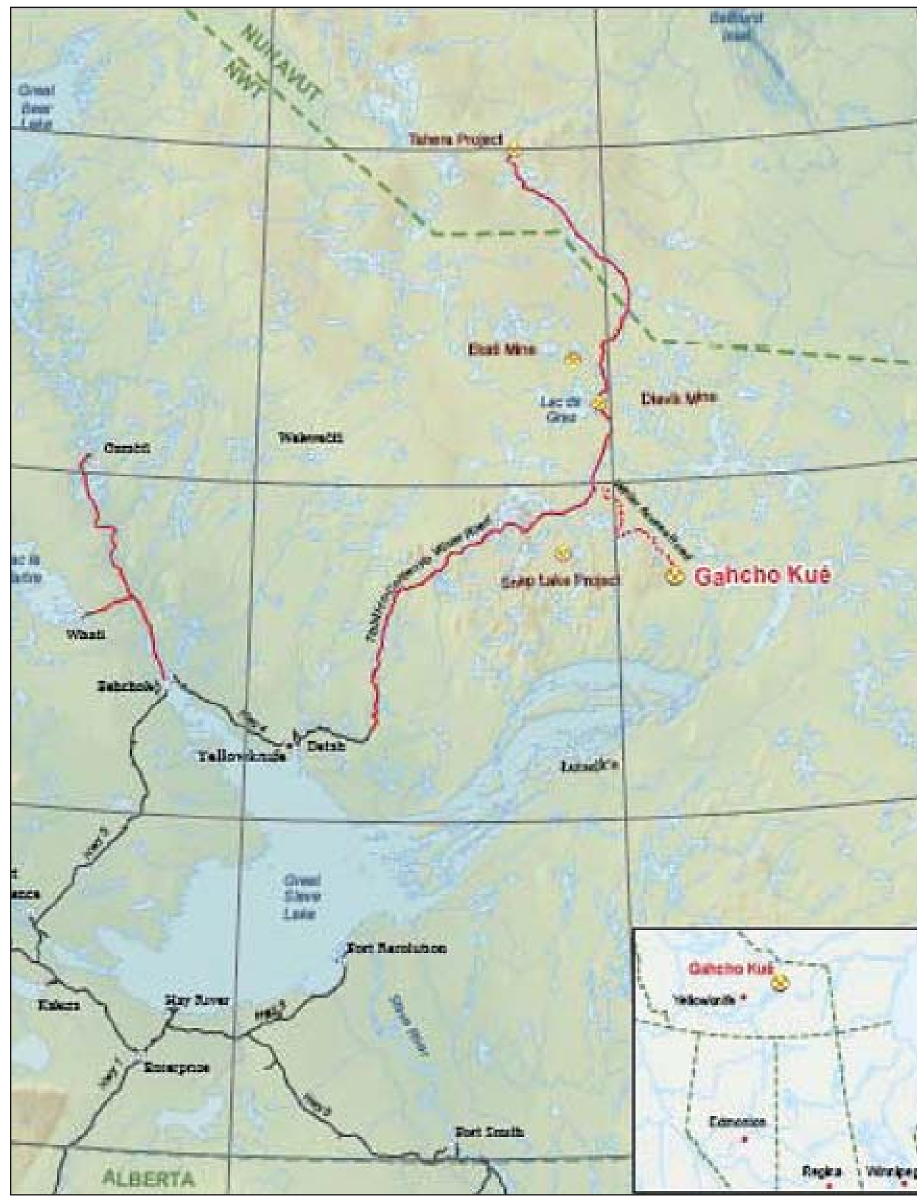
The DeBeers-led JV has mounted a drilling program this summer aimed at extracting 100 carats of diamonds from the North Lobe of the 5034 pipe for further evaluation.

The JV is also seeking regulatory permission to develop and operate a diamond mine with an estimated life span of 15 years with an estimated initial investment of more than $900 million.

The mine project would employ up to 700 construction workers and provide long-term work for 400 individuals, or nearly 1 percent of the Northwest Territories job market. In comparison to the Mackenzie Gas Project, Gahcho Kué would provide more person years of employment, according to the Mackenzie Valley Environmental Impact Review Board.

The Gahcho Kué work plan calls for draining Kennady Lake and excavating the Tuzo, Hearne and 5034 kimberlite pipes, and as the pipes are mined, waste

see GAHCHO KUE page 11



● BRITISH COLUMBIA

Gibraltar expansion nears end of phase 1

Taseko sees increased profits while investing in major upgrades at copper-moly mine that are improving recovery and throughput

By SARAH HURST
For Mining News

The expansion of Vancouver-based Taseko's Gibraltar mine in south-central British Columbia is progressing rapidly and the company's revenues are up, Taseko announced in its third-quarter report Aug. 14. Cash flow from operations was C$14.6 million in the third quarter of this year, an increase of $2.2 million over the same period last year. Gibraltar produced 12.7 million pounds of copper in the third quarter, an increase of 2.6 million pounds over the same period last year.

"We are very happy with the progress of operations and our construction at site," Russell Hallbauer, Taseko's president and CEO, said in a conference call Aug. 15. "We continue to be on time and on budget with our concentrator expansion and upgrade." Upon completion, Gibraltar's average annual production is expected to be 120 million pounds of copper and 1.4 million tons of molybdenum. The two-phase expansion is expected to cost approximately $130 million.

Gibraltar's phase 2 expansion is designed to increase concentrator capacity to 55,000 tons per day by late 2008.

Production affected by fire

Copper and molybdenum production at Gibraltar was affected by a fire in an electrical control room in the secondary crusher in late April. Nine days of mill production were lost due to downtime resulting from repairs directly related to fire damage. The mine continued to move waste rock during the mill shutdown. Copper and molybdenum recoveries were also lower than in previous quarters due to the transition to the new 160-cubic-meter flotation cells. All 10 cells were in operation on schedule by mid-July, and rougher flotation capacity has now been increased by 160 percent, according to Taseko.

Production from the solvent extraction/electrowinning plant was lower than expected during April and May as the operation worked through cold weather and system startup issues. The plant produced more than 500,000 pounds of copper in cathode in June, equating to an annual capacity of 6 million pounds.

The major SAG mill components for the expansion were constructed in Europe and commenced shipment in July. Mill motors and ancillary systems are on site at Gibraltar and are being installed in the newly erected SAG mill building. As a result of SAG mill installation and flotation upgrades, the ore processing capacity of the concentrator at Gibraltar will increase from 36,750 to 46,000 tons per day by the end of calendar 2007.

Gibraltar's phase 2 expansion is designed to increase concentrator capacity to 55,000 tons per day by late 2008. This project consists of modernizing and increasing regrind capacity, cleaner flotation and concentrate circuits, installing a two-stage pumping system, and adding a pebble crusher to the SAG mill circuit. ●

continued from page 10

GAHCHO KUE

rock and processed kimberlite slurry will be used to backfill the pipes already mined. The backfilling is designed to reduce the amount of waste rock left in on-land storage facilities at the end of the mine life and to assist in the refilling of Kennady Lake during the reclamation process.

An on-site processing plant will crush, size and refine kimberlite ore to extract rough diamonds. The diamonds would be transported to a diamond sorting and valuation facility in Yellowknife where they will be added to product from Snap Lake for sale to clients.

The processing plant will produce both coarse and fine processed kimberlite. Ferrosilicon powder and flocculants will be used as additives in the ore processing; both substances are environmentally benign. Processed rock not used in backfilling will be stored in one of two on-land processed kimberlite containment facilities. Waste rock will be used to seal in the processed kimberlite. At the end of mine life, a waste rock pile and the PKC storage facilities will be the most noticeable remainders of mining operations, according to the work plan.

Other key facilities proposed for Gahcho Kué include a water treatment plant, water management pond and sewage treatment plant. The sewage treatment plant will dewater sewage sludge and then treat the effluent and incinerate the solid material. This treated effluent will be discharged to Kennady Lake during the construction phase and directed to the processing plant during normal operations.

The project would make use of the Tibbitt-Contwoyto winter road, currently operated by the joint venture partners who operate the nearby Ekati, Diavik and Lupin mines. At Kilometer 271 of this road, a 72-mile winter access road extending to Gahcho Kué will be built according to requirements of the operating license of the Tibbitt-Contwoyto road. The project's work plan also calls for construction of a 45-meter-wide by 1,620-meter-long airstrip at the mine site.

A power plant, warehouse/workshop complex, administration complex and camp/accommodations also would be built at the Gahcho Kué site.

Review Board orders more environmental study

After completing an environmental assessment of the Gahcho Kué project, the review board ordered the project to undergo a complete environmental impact review.

The decision resulted in an unsuccessful court challenge from De Beers and its partners. They argued before the Supreme Court of the Northwest Territories that the review board did not follow Canadian law when it concluded that the proposed mine project needed additional study because it "likely is a cause for significant public concern" in the region.

The review board cited several reasons for its conclusion, including the huge impact a project the size of the proposed Gahcho Kué mine could have on the surrounding area's wildlife, especially the declining Bathurst caribou herd, which has shrunk more than 60 percent from 472,000 animals in 1986 to 186,000 animals in 2003 and on its indigenous residents. Communities of the Tlicho and Akaitcho First Nations regions are located near the proposed mine site.

"Adding a diamond mine and the associated increase in traffic on the ice road, to the already existing industrial development, including three diamond mines on the NWT side and one on the Nunavut side of the Slave geological province, is likely to further affect caribou. Given the observed decline and the importance of caribou to economy, culture and ecosystem, any appreciable impact on caribou may be considered significant. … Impacts on caribou are likely to be accompanied by impacts on the cultural, social, and economic well-being of residents of the Mackenzie Valley," the review board wrote.

Work plan calls on new technology

The review board also noted that new mine technology would be used to develop the Gahcho Kué mine.

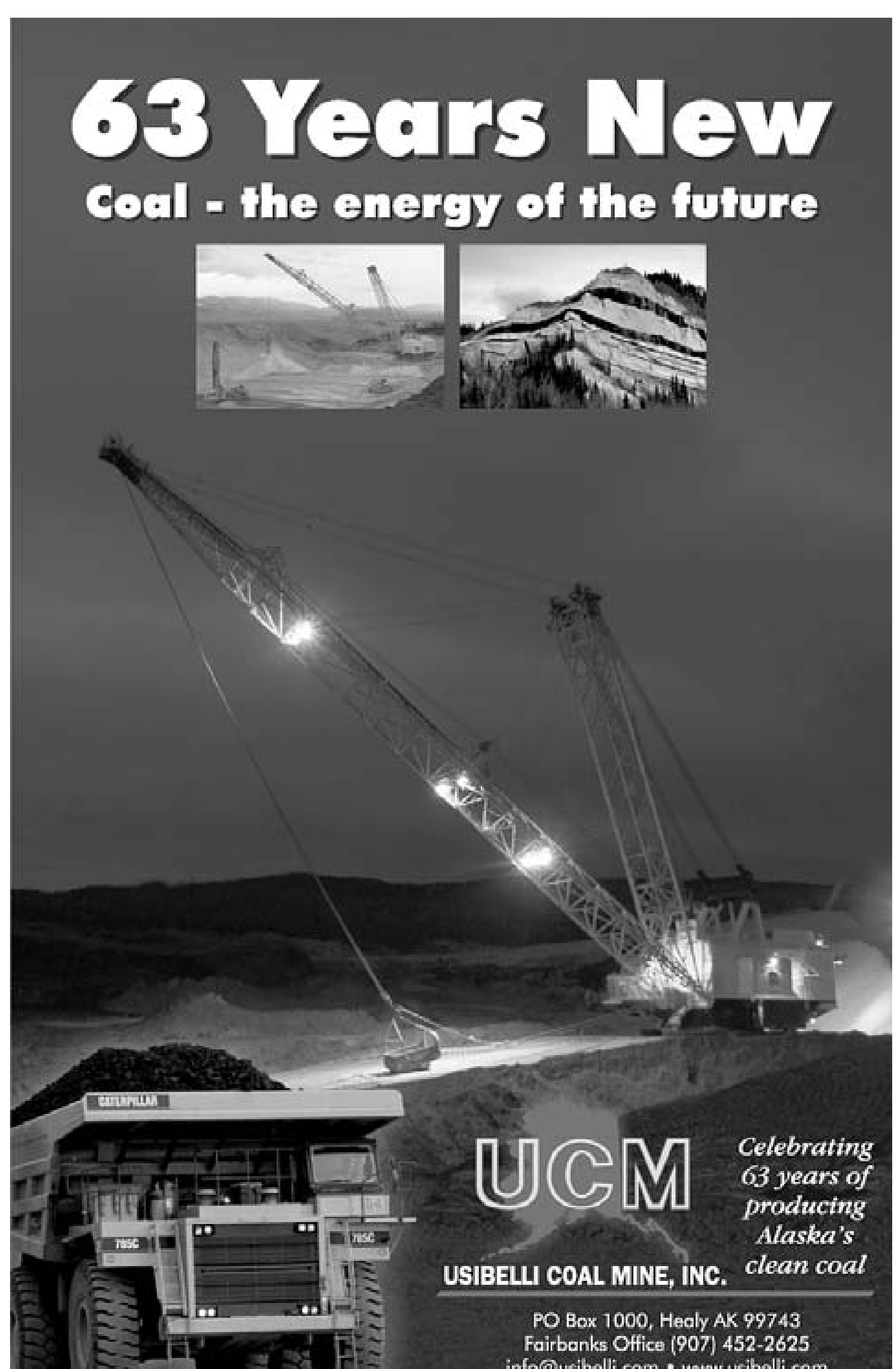
"Similarly, draining 80 percent of Kennady Lake and exposing the lake bottom for a long period of time is likely to affect the benthic environment of the lake. During both community and technical issues scoping the ecosystem's ability to recover has been questioned by residents as well as DFO representatives. Moreover, the release of large quantities of water into a drainage system characterized by little relief, and therefore slow-flowing streams, is likely to result in environmental change. This rapid release would later be followed by a flow reduction of 75 percent," the board said.

"There are numerous other issues, e.g. the proposed development's potential impacts on tourism or on family cohesion, for which the public record does not contain sufficient information for the review board to determine whether or not the development is likely to cause a significant adverse impact on the particular component of the environment," the board added.

The high court in the Northwest Territories upheld the review board's decision April 2.

On June 1, the review board released for public review and comments the JV's draft work plan for the Gahcho Kué project and expressed a hope that the DeBeers JV would complete an environmental impact statement for the project by October.

In a letter to the review board July 16, Ed Huebert, environmental affairs manager for De Beers Northwest Territories projects, suggested the EIS likely will be completed no earlier than January 2008. ●



● NORTH AMERICA

Teck Cominco recovers Red Dog's costs

NANA Regional Corporation to receive increased royalty; Pogo mine also achieved commercial production during Q2 this year

By SARAH HURST
For Mining News

Vancouver-based Teck Cominco has almost made enough money at Red Dog mine to start paying Alaska Native corporation NANA a 25 percent net proceeds of production royalty, the company announced in its second-quarter report July 30. Teck Cominco currently pays NANA an annual advance royalty equal to 4.5 percent of Red Dog's net smelter return. At a certain point specified in the royalty agreement, NANA must pay the 25 percent royalty, which increases in 5 percent increments every fifth year to a maximum of 50 percent.

Advance royalties previously paid are recoverable against the 25 percent royalty. In the fourth quarter of 2006, capital expenditures for Red Dog, including an interest factor, were fully recovered, Teck Cominco said. As of June 30, 2007, the unrecovered cumulative amount of advance royalty payments was $19 million. The company estimates that the payment of the 25 percent royalty to NANA will start in the third quarter of 2007, depending on metal prices, sales volumes and other items affecting the calculation of net proceeds.

Red Dog's operating profit in the second quarter was $119 million, up from $102 million in the same quarter last year. Zinc production in the quarter was 142,000 metric tons, a 7 percent increase compared with the same quarter in 2006. Teck Cominco attributes the increase partly to additional mill throughput and higher mill recoveries, the result of more amenable ores processed in the period. Lead production increased by 13 percent compared with the second quarter last year, reaching 31,600 tons. This was also the result of higher ore grades and improved mill recoveries due to the type of ore processed.

The first shipment of the year from Red Dog left the port on July 5, which was 19 days earlier than last year. Shipments of approximately 1 million tons of zinc concentrate and 260,000 tons of lead concentrate are planned, which is about the same volumes as were shipped in 2006.

Pogo commercial in April

Pogo gold mine near Delta Junction, which began production in early 2006, achieved commercial production in April 2007 and the operation broke even in the quarter. Gold production of 76,900 ounces in the second quarter was lower than full capacity as mill operations are still being optimized, according to Teck Cominco. Ore grades were also below plan due to stope sequencing and higher than expected dilution. Pogo's cash costs in the quarter were $460 per ounce, including the effect of higher inventoried production costs prior to the start of commercial production. The average realized gold price was $664 per ounce in the quarter.

At Teck Cominco's Highland Valley copper mine in south-central British Columbia, throughput has been reduced during the current push-back phase, which is being undertaken to extend the mine life. Copper production at the mine declined by 19 percent to 35,600 tons compared with the same period last year. Molybdenum production was also down by 19 percent. Operating profit at Highland Valley in the second quarter was $258 million, compared with $326 million in the same period last year.

Teck Cominco's unaudited net earnings in the second quarter totaled $485 million, down from $613 million in the same period last year. "Our core operations continued to perform well in the second quarter and prices for our major products remain high by historical standards," said Don Lindsay, the company's president and CEO. "Our net earnings of $485 million were in line with our expectations, but were below second-quarter earnings in 2006 because of lower coal prices and lower copper sales volumes." Teck Cominco holds a 40 percent interest in the Elk Valley Coal Partnership in southeastern British Columbia. ●

ALASKA

Kensington mine facilities are complete

Owners of the Kensington mine announced in mid-August that it has finished building nearly all the facilities that it needs to begin operations.

But plans for a disposal facility for a slurry containing millions of tons of mine waste into a small lake are still on hold, the Coeur d'Alene Mines Corp. said.

The federal 9th Circuit Court of Appeals ruled in May that the Idaho-based company's plan to pour the waste into Lower Slate Lake violates the Clean Water Act.

The 23-acre lake is in the Tongass National Forest and drains into Berners Bay.

A Kensington manager said in a letter to supporters that the mine's legal team is working to file a petition for a rehearing of the 9th Circuit ruling. The deadline for filing is Aug. 20.

The company said it has finished building all other parts of the mine, including roads, bridges, temporary housing, support buildings and tunnels.

Kensington should be in full operation by the middle of 2008, Kensington's special project manager Rich Richins said in the letter.

The mine, 45 miles northwest of downtown Juneau, is expected to produce up to 150,000 ounces of gold annually for 10 to 15 years.

The court has said the tailings would contain concentrations of several potentially hazardous materials, including aluminum, copper, lead and mercury.

"Until Coeur comes up with a legal mine plan, they can't start operations," said Buck Lindekugel, conservation director of Southeast Alaska Conservation Council. "The ball's in their court to move forward," he said.

Coeur d'Alene Mines is one of the world's largest silver producers.

—THE ASSOCIATED PRESS

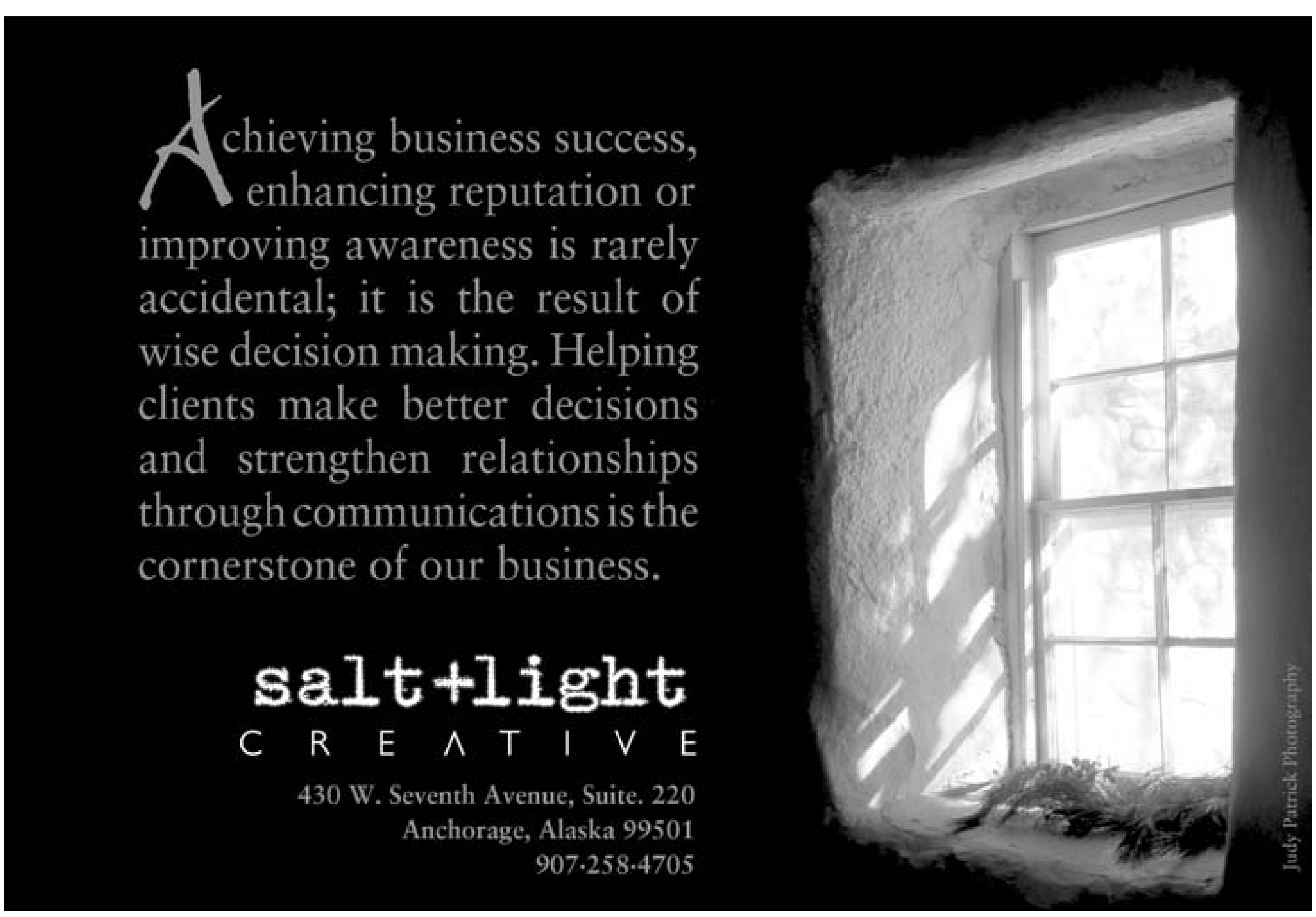
Jury rules Sullivan mine deaths accidental

A coroner's jury at an inquest in Kimberley, British Columbia, in mid-July decided that the four deaths at Teck Cominco's decommissioned Sullivan mine last year were accidental. Two workers and two paramedics died when they entered an airless water-sampling shed on the site. The paramedics weren't prepared for entering a mine building because they thought they were dealing with a drowning, the inquest found.

The jury handed down 16 recommendations to revamp mine safety rules. It recommended that the British Columbia Mines Ministry should review the effectiveness of its enforcement strategy for safety regulations; that a minimum number of inspections per mine each year should be established, with increased penalties for violations; and that within the next six months, all mines in the province should post signs on all confined spaces at their sites.

Teck Cominco will be closely reviewing the jury's recommendations to further increase its understanding of the causes of the incident, the company said in a release July 13. "Our objective has been to ensure the unprecedented and unforeseen events of May 2006 never happen again," said President and CEO Don Lindsay. "We are committed to identifying and managing hazards and risks at Kimberley and all of our operations. The jury's recommendations will form part of our ongoing work."

—SARAH HURST



We've got the coal world in our hands.

Do you want your company's ad to appear in the next issue of ***North of 60 Mining News***?

This monthly special supplement from Petroleum News is dedicated to covering the latest, most significant news from Alaska and northern Canada's mining industry.

Advertise today!

Call 907 522-9469
or sign-up online at www.PetroleumNews.com

NORTH OF 60 MINING NEWS DIRECTORY

Companies involved in Alaska and northwestern Canada's mining industry

The Red Dog mine in northwest Alaska.

Mining Companies

Fairbanks Gold Mining/Fort Knox Gold Mine
Fairbanks, AK 99707
Contact: Lorna Shaw, community affairs director
Phone: (907) 488-4653 • Fax: (907) 490-2250
Email: lshaw@kinross.com • Web site: www.kinross.com
Located 25 miles northeast of Fairbanks, Fort Knox is Alaska's largest operating gold mine, producing 340,000 ounces of gold in 2004.

Niblack Mining Corp.
Suite 615-800 W. Pender St.
Vancouver, BC V6C 2V6
Contact person: Paddy Nicol
Phone: (604) 682-0301 ext. 106
Fax: (604) 682-0307
E-mail: pnicol@niblackmining.com
Website: www.niblackmining.com

NovaGold Resources Inc.
2300 – 200 Granville Street
Vancouver, BC V6C 1S4
Contact person: Ariadna Peretz
Phone: 1 (866) 669-6227
Fax: (604) 669-6272
E-mail: ariadna.peretz@novagold.net
Other office:
Alaska Gold Company
P.O. Box 640
115 6th Avenue
West Nome, AK 99762-0640
Website: www.novagold.net
NovaGold Resources Inc. is a gold and copper company engaged in the exploration and development of mineral properties in Alaska and Western Canada.

Rimfire Minerals Corp.
Vancover, BC V6C 1G8 Canada
Contact: Ahnna Pildysh, Mkt. Coordinator
Phone: (604) 669-6660
Fax: (604) 669-0898
Email: ahnnap@rimfire.bc.ca • Web site: www.rimfire.bc.ca
Gold and silver projects in Alaska, Yukon, BC and Nevada. Preferred partner of senior mining firms. Partnered with the world's three largest gold producers.

Usibelli Coal Mine
Fairbanks, AK 99701
Contact: Bill Brophy, vp cust. relations
Phone: (907) 452-2625 • Fax: (907) 451-6543
Email: info@usibelli.com • Web site: www.usibelli.com
Other Office
P. O. Box 1000 • Healy, AK 99743
Phone: (907) 683-2226
Usibelli Coal Mine is headquartered in Healy, Alaska and has 200 million tons of proven coal reserves. Usibelli produced one million tons of sub-bituminous coal this year.

Service, Supply & Equipment

3M Alaska
11151 Calaska Circle
Anchorage, AK 99515
Contact: Paul Sander, manager
Phone: (907) 522-5200
Fax: (907) 522-1645
Email: innovation.3malaska@mmm.com
Website: www.3m.com
Serving Alaska for over 34 years, 3M Alaska offers total solutions from the wellhead to the retail pump with a broad range of products and services – designed to improve safety, productivity and profitability.

Ace Transport
Anchorage, AK 99502
Contact: Henry Minich, owner
Phone: (907) 243-2852 • Phone: (907) 229-9647 (cell)
Fax: (907) 245-8930 • Email: henryminich@aol.com
Specializing in heavy hauling. Equipment includes 85-ton lowboy.

Aeromed International
Anchorage, AK 99503
Contact: Brooks Wall, director
Phone: (907) 677-7501 • Fax: (907) 677-7502
Email: brooks_wall@ykhc.org • Web site: www.ykhc.org
Aeromed International is an all jet critical care air ambulance fleet based in Anchorage. Medical crews are certified Flight Nurses and certified Flight Paramedics.

Air Liquide
Anchorage, AK 99518
Contact: Brian Benson
Phone: (907) 273-9762 • Fax: (907) 561-8364
Email: brian.benson@airliquide.com
Air Liquide sells, rents, and is the warranty station for Lincoln, Miller, Milwaukee, Victor and most other welding equipment and tool manufacturers.

Alaska Cover-All
6740 Jollipan Crt.
Anchorage, AK 99507
Contact: Paul Nelson, mgr.
Phone: (907) 346-1319 • Fax: (907) 346-4400
E-mail: paul@alaskacoverall.com
Contact: Scott Coon
Phone: (907) 646-1219 • Fax: (907) 646-1253
Email: scott@alaskacoverall.com
National Call Center: 1-800-268-3768
We are the Alaska dealers for Cover-All Building Systems. Steel framed, fully engineered, LDPE fabric covered, portable buildings in 18 to 270 foot widths and any length.

Alaska Earth Sciences
Anchorage, AK 99515

see next page

Contact: Bill Ellis, Rob Retherford or Dave Lappi, owners
Phone: (907) 522-4664 • Fax: (907) 349-3557
Email: wte@aes.alaska.com
A full service exploration group that applies earth sciences for the mining and petroleum industries providing prospect generation, evaluation and valuation, exploration concepts, project management, geographic information systems and data management. We also provide camp support and logistics, geologic, geochemical and geophysical surveys.

Alaska Frontier Constructors
P.O. Box 224889
Anchorage, AK 99522-4889
Contact: John Ellsworth, President
Phone: (907) 562-5303
Fax: (907) 562-5309
Email: afcinfo@ak.net
Alaskan heavy civil construction company specializing in Arctic and remote site development with the experience, equipment and personnel to safely and efficiently complete your project.

Alaska Regional Council of Carpenters
410 Denali St, #100
Anchorage, AK 99501
Contact: Kathleen Bugbee, business development
Phone: (907) 274-2722
Fax: (907) 274-2727
Email: kathy1281@alaska.net
Website: www.ubcalaska.org
Training and representing skilled labor for quality contractors.

Alaska Steel Co.
1200 W. Dowling
Anchorage, AK 99518
Contact: Joe Lombardo, vice president
Phone: (907) 561-1188 • Toll free: (800) 770-0969 (AK only)
Fax: (907) 561-2935
Email: j.lombardo@alaskasteel.com
Fairbanks Office:
2800 South Cushman
Contact: Dan Socha, branch mgr.
Phone: (907) 456-2719 • Fax: (907) 451-0449
Kenai Office:
205 Trading Bay Rd.
Contact: Will Bolz, branch mgr.
Phone: (907) 283-3880 • Fax: (907) 283-3759
Full-line steel and aluminum distributor. Complete processing capabilities, statewide service. Specializing in low temperature steel and wear plate.

Arctic Controls
Anchorage, AK 99501
Contact: Scott Stewart, president
Phone: (907) 277-7555 • Fax: (907) 277-9295
Email: sstewart@arcticcontrols.com
Website: www.arcticcontrols.com
An Alaskan owned and operated company since,1985, Arctic Controls has been highly successful as manufacturer representatives for the state of Alaska in the Process Control and Instrumentation field.

Arctic Foundations
Anchorage, AK 99518-1667
Contact: Ed Yarmak
Phone: (907) 562-2741 • Fax: (907) 562-0153
Email: info@arcticfoundations.com
Website: www.arcticfoundations.com
Soil stabilization – frozen barrier and frozen core dams to control hazardous waste and water movement. Foundations – maintain permafrost for durable high capacity foundations.

Chiulista Camp Services/Mayflower Catering
6613 Brayton Dr., Ste. C
Anchorage, AK 99507
Contact: Joe Obrochta, pres.
Contact: Monique Henriksen,vp.
Phone: (907) 278-2208 • Fax: (907) 677-7261
Email: jobrochta@chiulista.com
The 100 percent Alaska Native owned and operated catering company on the North Slope, catering and housekeeping to your tastes, not ours.

CN Aquatrain
Anchorage, AK
Contact: Laurie A. Gray, agent
Phone: (907) 279-3131
Toll Free: (800) 999-0541 • Fax: (907) 272-3963
CN Aquatrain has provided Alaska with dependable access to Canadian and Lower 48 markets for 38 years.

Construction Machinery
5400 Homer Dr.
Anchorage, AK 99518
Contact: Ron Allen, Sales Manager
Phone: (907) 563-3822 • Fax: (907) 563-1381
Email: r.allen@cmiak.com • Web site: www.cmiak.com
Other Offices:
Fairbanks office
Phone: 907-455-9600 • Fax: 907-455-9700

Advertiser Index

Juneau office
Phone: 907-780-4030 • Fax: 907-780-4800
Ketchican office
Phone: 907-247-2228 • Fax: 907-247-2228
Wasilla Office
Phone: 907-376-7991 • Fax: 907-376-7971

Dowland-Bach Corp.
6130 Tuttle Pl.
P.O. Box 230126
Anchorage, AK 99523
Contact: Lynn Johnson, president
Phone: (907) 562-5818 • Fax: (907) 563-4721
E-mail: lynn@dowlandbach.com
Website: www.dowlandbach.com

Egli Air Haul
P.O. Box 169
King Salmon, AK 99613.
Contact: Sam Egli
Phone: (907) 246-3554 • Fax: (907) 246-3654
Email: egliair@bristolbay.com • Web site: www.egliair.com
Serving Alaska since 1982, we perform a wide variety of flight operations, including airplane and helicopter charter, aerial survey, and specialized operations such as external load work, powerline maintenance, aerial filming and videography.

Foundex Pacific
2261 Cinnabar Loop
Anchorage, AK 99507
Contact: Howard Grey, manager
Phone: (907) 522-8263 • Fax: (907) 522-8262
E-mail: hgrey@foundex.com • Website: www.foundex.com
Other offices:
Surrey, BC Canada
Contact: Dave Ward
Phone: 604-594-8333
Email: dward@foundex.com
Drilling services relating to exploration, geotechnical investigations and wells.

GPS Environmental
Industrial Water/Wastewater & Mining Equipment
3340 Arctic Blvd., Suite 102
Anchorage, AK 99503
Contact: Paul Schuitt
Phone: (907) 245-6606 • Cell: (907) 227-6605
Fax: (928) 222-9204
Email: paul@gpsenvironmental.com
Website: www.pgsenvironmental.com
GPS Environmental, LLC is a manufacturers representative company representing companies that manufacturer water treatment, wastewater treatment, mining equipment and modular camps.

Jackovich Industrial & Construction Supply
Fairbanks, AK 99707
Contact: Buz Jackovich
Phone: (907) 456-4414 • Fax: (907) 452-4846
Anchorage office
Phone: (907) 277-1406 • Fax: (907) 258-1700
24- hour emergency service. With 30 years of experience, we're experts on arctic conditions and extreme weather.

Judy Patrick Photography
Anchorage, AK 99501
Contact: Judy Patrick
Phone: (907) 258-4704 • Fax: (907) 258-4706
Email: jpphoto@mtaonline.net
Website: JudyPatrickPhotography.com
Creative images for the resource development industry.

Lynden
Alaska Marine Lines • Alaska Railbelt Marine
Alaska West Express • Lynden Air Cargo
Lynden Air Freight • Lynden International
Lynden Logistics • Lynden Transport
Anchorage, AK 99502
Contact: Jeanine St. John
Phone: (907) 245-1544 • Fax: (907) 245-1744
Email: custsvc@lynden.com
The combined scope of the Lynden companies includes truckload and less-than-truckload highway connections, scheduled barges, intermodal bulk chemical hauls, scheduled and chartered air freighters, domestic and international air forwarding and international sea forwarding services.

MRO Sales
Anchorage, AK 99518
Contact: Don Powell
Phone: (907) 248-8808 • Fax: (907) 248-8878
Email: Sales1@mrosalesinc.com
Website: www.mrosalesinc.com
MRO Sales offers products and services that can help solve the time problem on hard to find items.

Northern Air Cargo
3900 W. International Airport Rd.
Anchorage, AK 99502
Contact: Mark Liland, acct. mgr. Anch./Prudhoe Bay
Phone: (907) 249-5149 • Fax: (907) 249-5194
Email: mliland@nac.aero • Website: www.nac.aero
Serving the aviation needs of rural Alaska for almost 50 years, NAC is the states largest all cargo carrier moving nearly 100 million pounds of cargo on scheduled flights to 17 of Alaska's busiest airports. NAC's fleet of DC-6, B-727, and ATR-42 aircraft are available for charters to remote sites and flag stops to 44 additional communities.

Pacific Rim Geological Consulting
Fairbanks, AK 99708
Contact: Thomas Bundtzen, president
Phone: (907) 458-8951 • Fax: (907) 458-8511
Email: bundtzen@mosquitonet.com
Geologic mapping, metallic minerals exploration and industrial minerals analysis or assessment.

PTI Group
Edmonton, AB, Canada T6N 1C8
Phone: (800) 314-2695 • Fax: (780) 463-1015
Email: ptigroup@ptigroup.com
Website: www.ptigroup.com
PTI Group Inc. is the premium supplier of integrated remote site services. Offering full turnkey packages or individual services such as construction, catering and wastewater treatment, PTI delivers above and beyond client expectations.

Shaw Alaska
2000 W. International Airport Rd, C-1
Anchorage, AK 99502
Contact: Jane Whitsett, office director
E-mail: jane.whitsett@shawgrp.com
Phone: 907-243-6300
Fax: 907-243-6301
Website: www.shawgrp.com
Shaw Alaska is a subsidiary of The Shaw Group, one of the World's largest providers of engineering, design, construction, environmental, infrastructure, fabrication and manufacturing services.

U.S. Bearings & Drives
Anchorage, AK 99518
Contact: Dena Kelley, branch mgr.
Phone: (907) 563-3000 • Fax: (907) 563-1003
Email: dkelley@bearings.com • Web site: www.bearings.com
U.S. Bearings & Drives has been providing solutions to it customers for over 25 years. We offer quality components, name brands and highly trained personnel.

VECO
949 E. 36th Ave., Ste. 500
Anchorage, AK 99508
Contact: Emily Cross
Phone: (907) 762-1510 • Fax: (907) 762-1001
Email: emily.cross@veco.com • Web site: www.VECO.com
VECO is a multi-national corporation that provides services, project management, engineering, procurement, construction, operations and maintenance – to the energy, resource and process industries and the public sector.

● ALASKA

Coal miner's daughter sings his praises

Women from the small town of Healy often head out of Alaska, but Elizabeth Usibelli is living up to her name, thanks to dad John

By SARAH HURST
For Mining News

COURTESY ELIZABETH USIBELLI

John Usibelli

Not all parents are sure that their kids appreciate them. But when they follow you into the family business and one of them writes an article describing you as a role model and all-around great guy, you can relax with a beer, put your feet up and think, "I've done OK." This is precisely the case for 43-year-old John Usibelli, father of Elizabeth and Vincent, all of whom are currently working at the coal mine in Healy that was founded by John's great-uncle, Emil.

"He is a very talented, low-key man; a working man's man; a well-rounded individual; a role model and a jack of all trades," Elizabeth wrote in her article about John, which inspired Mining News to talk to them both and find out more. John was aware of the mining going on around him even as a young child, although he didn't know his grandfather, John, or Emil Usibelli, because they both died before he was born.

Before the Parks Highway connected Healy to Anchorage and Fairbanks, John and his two sisters and parents had to fly to Fairbanks in the company airplane to get groceries. "I used to hate that when I was about four because of the turbulence," John recalled. In the mornings he would see everyone setting off to work every day on foot, as the mine site was within walking distance of the town.

COURTESY ELIZABETH USIBELLI

John, Elizabeth and Vincent Usibelli are the third and fourth generations of the family to work at the coal mine in Interior Alaska.

John's father, Roland, was an equipment operator at the mine, and would talk about how the dozers removed the overburden so that the truck shovel could get in to mine the coal, and how the wash plant worked. "I always thought of it as a big sandbox with equipment," John said. John's older sister graduated in 1980 and left Alaska. Roland retired in 1981 and moved to the West Coast with John's younger sister.

John Usibelli operated equipment, studied mining engineering

John also thought about leaving, but most of the male friends he grew up with stayed and worked at the mine. So for a couple of years before enrolling at the University of Alaska Fairbanks he "stuck around and operated equipment," under the supervision of Warren Mattielli. At UAF he started out doing an associate's degree in welding technology, then switched to a bachelor's in mining engineering.

When John returned to Healy in 1986, it didn't escape his notice that the ratio of men to women in the area was rather disproportionate. Fortunately, he was introduced to his wife Teresa Chepoda by Mattielli, who had been at high school in Washington with Teresa's mother. Teresa is "quite the entrepreneur," according to Elizabeth. At one point she was running four businesses: a car rental company, a drive-thru coffee shop, a bed and breakfast and a U-Haul. Now it's just the latter two, and in the summer John helps out at the bed and breakfast, which he built himself — a large log house called Alaskan Chateau.

John was a production engineer at the mine for about nine years, "meaning I was the guy that knew ahead of time what needed to be moved, when, where," he said. That included knowing which way the dirt was going to move when 300 tons of explosives were shot on a vertical coal seam within 250 feet of the upper shop in 1999 — one of the trickier challenges of John's career — and thanks to him the shop remained intact. He also correctly calculated the distance for rerouting the power cable for the dragline during its move in 2002. If he had been out by a few feet, the cable couldn't have plugged in. "It was gratifying to see that all the topography maps matched up," John said.

Elizabeth listed some more of John's achievements in her article: "(he) negotiated the explosive bid to an eight-year low, implemented single seam cast blasting and forecasted five explosive budgets within 8 percent of actual. All of the pits he directly designed and managed were within 10 percent of budget. ... He is a great example of a man who has worked from the bottom and up."

Elizabeth Usibelli is doing an internship at the mine

For the past three years John has been doing various jobs at the mine, including "dabbling in special projects" and supervising reclamation. "I was burned out on the day-to-day work; there was no excitement anymore," he said. "Prediction was second nature." Currently he is trying to retrofit the tipple system, which crushes the coal into smaller chunks. It was built in 1982 when the mine used 45-ton trucks. Now 150-ton trucks are dumping their loads into the same vault, and it's the mine's biggest bottleneck, according to John. One of his goals is to get a 5-10 percent increase in productivity.

The new role has given John a chance to work closely with Elizabeth, who's now 20. She started out at the mine at the age of 17 after graduating from Tri-Valley High School, "to make a quick pay check for college." Elizabeth got into a program for the children of employees that enables them to work as tour guides and in reclamation, as long as they are enrolled in college. As a tour guide she got to know about all aspects of the mine, and on the reclamation side she planted trees and helped out in the lab.

At middle school Elizabeth wanted to be a teacher or a lawyer. "I definitely didn't think I was going to work at the mine, I wasn't very interested," she said. But in her summer job there she learned that there was a lot more to it than she'd imagined. In her sophomore year at UAF, Elizabeth "decided my dad was pretty inspiring. I decided, hey, I can do that," and she enrolled in the mining engineering program. This summer she has been doing an internship at the mine to find out if it's really what she wants. John entrusted her with a project to design a tipple add-on that makes the daily coal sampling easier to do, and now she's moved out of the office to the field, as an exploration geologist.

"She's putting in 11- to 12-hour days getting pretty muddy," John said. "It's kind of strange, as she's always telling me she's more of a girly girl. I never thought I'd see that." In fact, it was Elizabeth's brother Vincent, 19, who showed more interest in the mine as a child (he was excited by the explosives), and Vincent is working in the reclamation program at Usibelli now, but he hasn't made up his mind about it as a career.

"I loved growing up here in Healy, the opportunities were endless, you could play on any kind of sports team you wanted and actually get played," Elizabeth recalled. Healy has a population of about 1,000 and there were 60 kids at Elizabeth's high school. "I played hockey, volleyball, basketball and did dance. I was doing two practices a day or three because some of the seasons would run into each other. I was editor of the school newspaper," she recalled.

Elizabeth Usibelli hasn't yet decided on career path

John is also keen on sports, playing golf and basketball, as well as going hunting, fishing and camping in his spare time. He is also a volunteer and vice president for the board of the local hockey team, the Healy Coal Kings, which Elizabeth and Vincent both play for. The Usibellis are a family that's likely to stick together no matter where life takes them. John is considering doing more in the tourism business in the future, as he enjoys meeting the people from all over the world who come to the bed and breakfast. Elizabeth hasn't decided what her path will be in the mining industry yet.

"I'm on the fence — I know that I want to be involved in the mining environment, but it might be as a mining engineer or a lawyer. The whole process is interesting to me, the environmental part, how they go about getting what they want out of the ground while being conscious of the earth during and after," Elizabeth said. "I'm surprised at the mentality of people about mines still today, they think you can dig a hole in the ground and it's not regulated. I think it's very hypocritical. They are against coal mines, yet they enjoy the convenience of turning on a light switch and they have no problem putting gas emissions into the air while running their vehicles."

If Elizabeth were to start her own consulting company, as she suggested she might, John would join her "in a heartbeat," he said. "She's definitely intelligent and she's a people person," he added. John's family "is the most important thing to him and the only support he needs to be successful in life," Elizabeth wrote in her article, returning the compliment. "I am so damn proud of him that I too have chosen the same career as him." ●

Shaw® Shaw Alaska, Inc.

- Environmental Assessment and NEPA Permitting
- Natural Gas Pipeline Permitting
- Worldwide Technology-Based Pipe Fabrication Facilities
- Environmental Data Quality Management Services
- Contaminated Sites Closure—Innovative, Technical Solutions
- Homeland Security
- Engineering, Design, and Construction Services
- Natural Gas Pipelines and LNG Facilities
- Hydroelectric and Fossil Fuel Power Plants
- Refining and Petrochemical Facilities

www.shawgrp.com
2000 W. INTERNATIONAL • AIRPORT RD. SUITE C-1 • ANCHORAGE, AK 99502
PHONE: 907.243.6300 • FAX: 907.243.6301


Momma is a miner.
HITACHI
EUCLID
Photo: Prince of Wales Island, Alaska
Anchorage Sales Team – Top Row (from Left to the Right): Jeremiah Johnson, Mike Dwyer, Robert Fairbanks, Kirk Currey, Mike Miller; Bottom row (Left to Right): Ron Allen, Scott Allen, Bill Frishe
IN THE WORLD
Hitachi, the best in construction and mining technology.
IN ALASKA
CMI, the best sales and product support lineup.
IN YOUR CORNER
The Winning Team.
Construction Machinery Industrial, LLC
Anchorage, Alaska
(907) 563-3822
(800) 478-3822
Fairbanks, Alaska
(907) 455-9600
Juneau, Alaska
(907) 780-4030
(888) 399-4030
Ketchikan, Alaska
(907) 247-2228
HITACHI
ALWAYS | ORANGE