Petroleum news

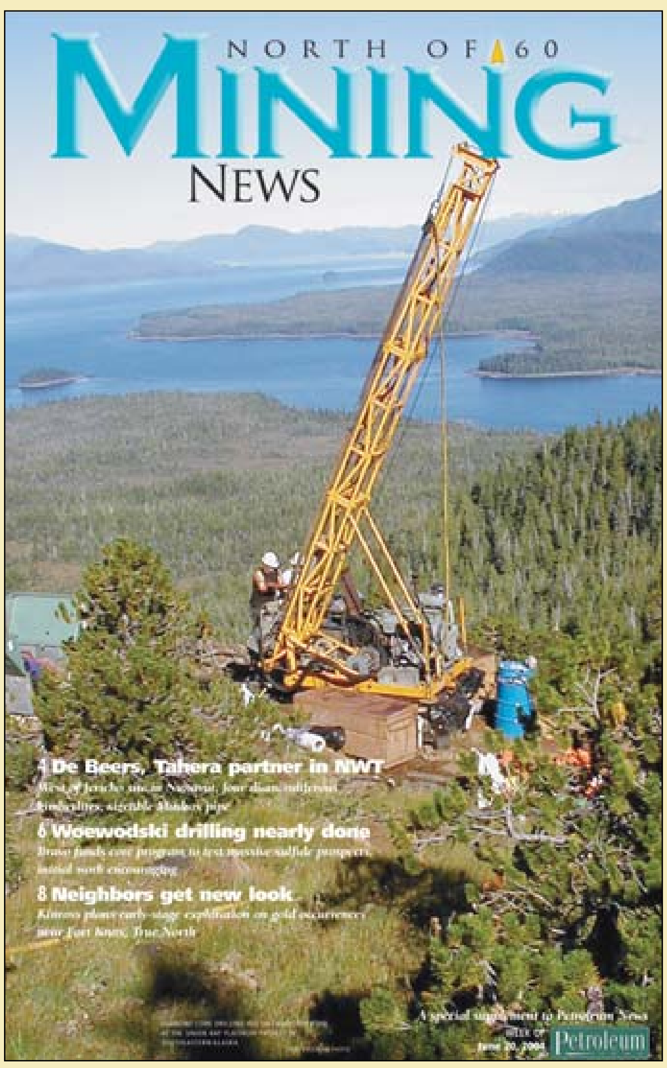
Vol. 9, No. 25 • www.PetroleumNews.com

North America's source for oil and gas news

Week of June 20, 2004 • $1

page 9 State of Alaska, PRA release North Slope facility sharing study

North of 60 Mining News inside



This month's North of 60 Mining News in enclosed in this edition of Petroleum News, as is the monthly Petroleum Directory (section B).

Capex in oil sands heading for stratosphere, C$93.5B next 8 years

Oil sands spending could top C$6 billion this year, but that will pale alongside the C$93.5 billion the Alberta government is projecting for the next eight years.

The province's Economic Development Department released a study in June that forecast the mind-boggling capex budget for new and expanded projects by 2012 — a figure that dwarfs the estimated C$28 billion invested in the sector so far.

If the projections are accurate, the government said production could reach 1.8 million barrels per day of synthetic crude and 1.2 million bpd of bitumen — about triple the expected output this year. For this year, the Athabasca Regional Issues Working Group, an industry coalition, is counting on spending of C$6.1 billion, edging out last year's C$5.5 billion and falling only slightly short of the record C$6.6 billion in 2002.

Currently, 61 projects are in the pipeline for the vast northeastern Alberta resource of 175 billion barrels.

—**GARY PARK,** Petroleum News Calgary correspondent

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

MACKENZIE DELTA

Bank on it

Chevron winner in Mackenzie sale; acreage close to well drilled last winter

By DON WHITELEY
Petroleum News Contributing Writer

To paraphrase Mark Twain, reports of Chevron Canada Resources' demise in the Canadian oil patch were premature. Weeks after parent ChevronTexaco announced a large sale of assets in the Western Canadian sedimentary basin, Chevron and partner BP turned up as the biggest winner in a Mackenzie Delta lease sale.

In a 50-50 partnership with BP Canada Resources Inc., Chevron was the successful bidder on 56,000 hectares of leases in the Mackenzie Delta, about 100 kilometers northwest of Inuvik.

> *"We've been saying that all along we're committed to Canada."*
> —**David Pommer, Chevron Canada**

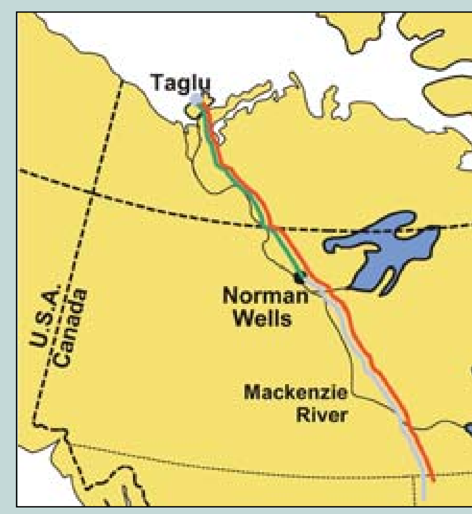
With a commitment to spend nearly C$62 million over five years (and a deposit of C$15 million), the Chevron-BP partnership was the biggest of five Delta and Mackenzie Valley leases awarded by the Northern Oil and Gas Directorate of Canada's Department of Indian Affairs and Northern Development.

Ten companies will spend C$124.9 million to ramp up exploration activities in anticipation of a new natural gas pipeline to carry existing and future gas production from the north to markets in southern Canada and the United States. The area covered by the new leases is more than 2,000 square kilometers.

Chevron spokesman David Pommer put to rest any suggestion that the asset sale — more than C$1 billion worth of oil and gas reserves and production in Alberta and British Columbia — was an indication that the company was losing its enthusiasm for Canada.

"We've been saying that all along we're com-

see **CHEVRON** *page A18*



Mackenzie gasline applications to be filed later this summer

The project leader for the Mackenzie Valley natural gas pipeline said June 15 that all the regulatory applications for the line will be filed "later this summer," a more definite timetable than the "sometime in the second half of the year" previously announced.

The announcement came in a speech by K.C. Williams, director and senior vice-president of Imperial Oil, to the Canadian Association of Petroleum Producers Investment Symposium in Calgary.

Imperial is the project leader and operator for the proposed gas-gathering system and the Mackenzie Valley Pipeline. The pipeline consortium also includes ConocoPhillips, Shell Canada and ExxonMobil, which owns almost 70 percent of Imperial.

see **GASLINE** *page A18*

NORTH AMERICA

CNG ships an option

Newfoundland university sets up research center for CNG development

PETROLEUM NEWS

COURTESY ENERSEA TRANSPORT

Compressed natural gas carriers, operating without the super-cold temperatures, high pressure and expensive liquefaction and regasification terminals required for liquefied natural gas, could be an answer for moving stranded gas short distances, though proponents say the first full-scale commercial operation is five or six years away.

Most of the investment would be in ships, not immovable terminals to turn gas into and out of its liquid state, a plus for CNG transport from smaller fields, supporters say. Although the ships wouldn't be able to carry as much gas as an LNG tanker, at shorter distances CNG could be an affordable answer, advocates say.

Cooling the gas below zero, but nowhere near the minus 259 degrees required for LNG, and pumping it into shipboard tanks at 1,300 to 1,800 pounds per square inch wouldn't require much more than a compressor operation at an offshore loading terminal, said John Dunlop, vice president for business develop-

see **CNG** *page A16*

Alaska - Mackenzie Rig Report

Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
Alaska Rig Status			
North Slope - Onshore			
Doyon Drilling			
Dreco 1250 UE	14 (SCR/TD)	Milne Point, reentry MPL-43	BP
Sky Top Brewster NE-12	15 (SCR/TD)	Deadhorse yard	Available
Dreco 1000 UE	16 (SCR)	W pad workover W-11	BP
Dreco D2000 UEBD	19 (SCR/TD)	Alpine, drilling CD2-31	ConocoPhillips
OIME 2000	141 (SCR/TD)	Infield Kuparuk, drilling 1E-123	ConocoPhillips
Nabors Alaska Drilling			
Trans-ocean rig	CDR-1 (CT)	Stacked, Prudhoe Bay	Available
Dreco 1000 UE	2-ES (SCR)	Prudhoe Bay, C-24A	BP
Mid-Continent U36A	3-S	Prudhoe Bay, 1E-123	ConocoPhillips
Oilwell 700 E	4-ES (SCR)	Prudhoe Bay, J-07A	BP
Dreco 1000 UE	7-ES (SCR/TD)	Prudhoe Bay, A-30	BP
Dreco 1000 UE	9-ES (SCR/TD)	Prudhoe Bay, V-02	BP
Oilwell 2000 Hercules	14-E (SCR)	Stacked, Deadhorse	Available
Oilwell 2000 Hercules	16-E (SCR/TD)	Stacked, Prudhoe Bay	Available
Oilwell 2000	17-E (SCR/TD)	Stacked, Point McIntyre	Available
Emsco Electro-hoist -2	18-E (SCR)	Stacked, Deadhorse	Available
OIME 1000	19-E (SCR)	Stacked, Deadhorse	ConocoPhillips
Emsco Electro-hoist Varco TDS3	22-E (SCR/TD)	Stacked, Milne Point	Available
Emsco Electro-hoist	28-E (SCR)	Stacked, Deadhorse	Available
OIME 2000	245-E	Stacked, Kuparuk	ConocoPhillips
Nordic Calista Services			
Superior 700 UE	1 (SCR/TD)	Drill site 6 well 23A	BP
Superior 700 UE	2 (SCR)	Endicott, drill site 18 well 33B	BP
Ideco 900	3 (SCR/TD)	Meltwater, moving to 1G-08	ConocoPhillips
North Slope - Offshore			
Nabors Alaska Drilling			
Oilwell 2000	33-E (SCR/TD)	Stacked, NorthStar	BP
Emsco Electro-hoist Canrig 1050E	27-E (SCR/TD)	Stacked at 12-acre pad	Kerr-McGee
Cook Inlet Basin – Onshore			
Aurora Well Service			
Franks 300 Srs. Explorer III	AWS 1	Nicolai Creek, NCU3 workover	Aurora Gas
Evergreen Resources Alaska			
Wilson Super 38	96-19	Stacked in Wasilla yard	Evergreen Resources Alaska Corporation
Inlet Drilling Alaska/Cooper Construction			
Kremco 750	CC-1	Stacked, Kenai	Forest Oil
Kuukpik	5	Swanson River, drilling 241-16	Unocal
Marathon Oil Co. (Inlet Drilling Alaska labor contractor)			
Taylor	Glacier 1	Working on well Beaver Creek #12	Marathon
Nabors Alaska Drilling			
Rigmasters 850	129	Kenai, Red #1	Unocal
National 110 UE	160 (SCR)	Stacked, Kenai	Available
Continental Emsco E3000	273	Stacked, Kenai	Available
	51	Steelhead platform, done 12-1-03	Unocal
IDECO 2100 E	429E (SCR)	Stacked, removed from Osprey platform	Available
Water Resources International			
Ideco H-35 KD		Prep to resume operations	Pelican Hill
Cook Inlet Basin – Offshore			
Cudd Pressure Control	340K	Workover, Osprey Platform	Forest Oil
Unocal (Nabors Alaska Drilling labor contractor)			
Not Available			
XTO Energy (Inlet Drilling Alaska labor contract)			
National 1320	A	Idle	Idle
National 110	C (TD)	Idle	XTO
Mackenzie Rig Status			
Mackenzie Delta-Onshore			
AKITA Equtak			
Dreco 1250 UE	62 (SCR/TD)	Stacked Tuktoyaktuk, NT	EnCana
Dreco 1250 UE	63 (SCR/TD)	Stacked, Lucas Point, NT	Chevron Canada
National 370	64	Stacked, Inuvik, NT	Available
Central Mackenzie Valley			
AKITA/SAHTU			
Oilwell 500	51	Stacked in Norman Wells, NT	Available
Nabors Canada			
	62	Racked	Available

The Alaska - Mackenzie Rig Report as of June 16, 2004. Active drilling companies only listed.

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

This rig report was prepared by Wadeen Hepworth

Nabors Alaska Drilling's Rig 273, JUDY PATRICK

Baker Hughes North America rotary rig counts*

	June 4	June 11	Year Ago
US	1,187	1,168	1,071
Canada	273	256	315
Gulf	95	90	106

Highest/Lowest

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

*Issued by Baker Hughes since 1944

Rig start-ups expected in next 6 months

Rig Owner/No.	Rig Location/Activity	Operator
Aurora Gas AWS1	Will be moving to Kaloa 3 and then to Long Lake 1 for a re-entry	Aurora Gas
XTO Energy A & C	The rig on platform C will be reactivated in late June 2004.	XTO

WASHINGTON, D.C.

House passes refinery expansion bill, ANWR dropped from mining bill

House Republicans pushed through legislation June 16 that supporters said would speed construction of new refineries to ease tight gasoline supplies. Opponents said the bill would reduce environmental protection and do little to stem high fuel costs.

The legislation was approved by a vote of 239-192 as House Republican leaders sought to dramatize the congressional impasse over energy legislation by bringing up for votes a series of energy-related bills.

The refinery legislation would make the Energy Department the key agency dealing with refinery permits for plants proposed in designated development zones where there is high unemployment or where a refinery had been closed. It also would require that permit decisions be made within six months after applications are received.

GOP leaders also unexpectedly abandoned plans to take up once again the issue of oil drilling in Alaska's Arctic National Wildlife Refuge after it became uncertain they had enough votes to get the bill passed.

To attract more Democrats, the bill earmarked revenue from the refuge's oil for funding of a miners' health care plan. However, the miners' union said it opposed the provision, prompting Rep. Richard Pombo, R-Calif., to withdraw the legislation. The House repeatedly has approved oil drilling in the Alaska refuge, only to see the measure killed in the Senate.

ANWR could re-emerge

Brian Kennedy, spokesman for House Resources Committee Chairman Richard Pombo, said a revised mining bill could re-emerge as this issue of Petroleum News goes to press.

"One of the unions that we were trying to help in this endeavor decided at the 11th hour not to support the bill," Kennedy said. "So Chairman Pombo pulled it from con-

see **HOUSE** *page A18*

ALASKA

RCA lowers trans-Alaska pipeline tariffs for 2001-2003, sets permanent, lower rate

The Regulatory Commission of Alaska has ruled against the owners of the trans-Alaska pipeline system, finding their intrastate rates for shipping oil from 2001 through 2003 to be unreasonably high.

In its June 10 order RCA also established lower, permanent post-2000 intrastate rates and ordered the TAPS carriers to refund the difference to shippers for the years 2001-2003.

The order, which can be found online at

http://www.state.ak.us/rca/orders/2004/p03004_34.pdf, was in response to a June 3, 2003 rate filing by the TAPS carriers that used a methodology established in a 1986 settlement between the carriers and state and federal regulators.

see **TARIFFS** *page A19*

SASKATCHEWAN

Enviro study ordered for Great Sand Hills

Oil and gas exploration of Saskatchewan's Great Sand Hills area will await a $4 million environmental study, the provincial government announced June 16. At the same time, the government quadrupled the area already declared off-limits to resource extraction, to 365 square kilometers.

The Great Sand Hills is a 1,900 square kilometer collection of naturally occurring sand dunes and prairie grass considered an ecological jewel by conservationists. Located just north of the Trans Canada Highway and on the Alberta border, the dunes are estimated to be nearly 10,000 years old.

Drilling can continue in areas where oil companies have already staked their claim, but no more mineral rights will be sold until after the study has been completed.

"We are looking at the whole landscape and that is very important," Saskatchewan Environment Minister David Forbes told Canadian Press. "There may be stakeholders who feel we could have gone further — people who think that this wasn't enough — but I think this is a very good start."

Industry Minister Eric Cline said he expects the review will be also be well-received by the oil and gas industry. "What industry wants is clarity - they want to understand what the rules are," he said.

—DON WHITELEY, Petroleum News contributing writer

Issue Index

Petroleum news

North America's source for oil and gas news

Dan Wilcox	CHIEF EXECUTIVE OFFICER
Mary Craig	CHIEF FINANCIAL OFFICER
Kay Cashman	PUBLISHER & MANAGING EDITOR
Kristen Nelson	EDITOR-IN-CHIEF
Gary Park	CALGARY CORRESPONDENT
Ray Tyson	HOUSTON CORRESPONDENT
Steve Sutherlin	ASSOCIATE EDITOR
Wadeen Hepworth	ASSISTANT TO THE PUBLISHER
F. Jay Schempf	CONTRIBUTING WRITER (HOUSTON)
Alan Bailey	CONTRIBUTING WRITER
Allen Baker	CONTRIBUTING WRITER
Don Whitely	CONTRIBUTING WRITER (VANCOUVER)
Paula Easley	COLUMNIST
Patricia Liles (formerly Jones)	CONTRIBUTING WRITER (FAIRBANKS)
Laura Erickson	SPECIAL PROJECTS COORDINATOR
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Firestar Media Services	DIRECTORY PROFILES
Mapmakers Alaska	CARTOGRAPHY
Susan Crane	ADVERTISING DIRECTOR
Forrest Crane	CONTRACT PHOTOGRAPHER
Steven Merritt	PRODUCTION DIRECTOR
Tom Kearney	ADVERTISING DESIGN MANAGER
Heather Yates	CIRCULATION MANAGER
Tim Kikta	CIRCULATION REPRESENTATIVE
Dee Cashman	CIRCULATION REPRESENTATIVE

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

EDITORIAL
Anchorage
907.522.9469
Juneau
907.586.8026

EDITORIAL EMAIL
publisher@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.

Petroleum News (ISSN 1544-3612) Week of June 20, 2004
Vol. 9, No. 25
Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518
(Please mail ALL correspondence to:
P.O. Box 231651, Anchorage, AK 99523-1651)
Subscription prices in U.S. — $52.00 for 1 year, $96.00 for 2 years, $140.00 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 231651 • Anchorage, AK 99523-1651.

● BERLIN

The peak oil debate — lessons from Europe?

By ROGER HERRERA

For Petroleum News

The debate on the timing of when the world's oil production will reach its peak has not been resolved. This is proving to be a frustration to many countries and international businesses whose plans demand a reasonable expectation of secure oil supplies at an acceptable price. When should an electricity generating company elect to change its fuel from oil or gas to coal or even some renewable energy form? When should a merchant banker lighten up a multi billion-dollar oil stock portfolio? When should an average citizen sell his SUV for a small, more efficient automobile? All those decisions are made easier if one has accurate foreknowledge of when the peak in oil production will occur.

Unfortunately the answer is in dispute, but the nations that constitute the European Union have taken the attitude that peak oil is inevitable and if it doesn't happen for 20 or 30 years, so much the better because that leaves more time to plan and make the necessary changes in the region's energy mix. In contrast, in America, which uses twice as much energy per capita as Europe and consumes about 25 percent of the world's oil, there seems little concern about future oil supplies. We are fighting a war and $2 a gallon gasoline is a worry, but nuclear power is not acceptable, new refineries cannot be built, natural gas is OK, but is already in decline, and wind power should not be considered in my backyard.

America has little to worry about

The truth of the matter is that if one considers this issue in a selfish, nationalistic fashion, America has little to worry about for a long time to come. Simple conservation could eke out our oil for decades. We have untold coal and if we continue to ignore CO2 emissions, peak oil might not be a major economic problem irrespective of when it occurs. The same is not true in Africa, Asia or Europe. The rest of the world is very worried about peak oil.

Asia, the world's most populous continent, is in the middle of head-spinning annual growth and China is now the second biggest user of oil and the second largest generator of electricity. Both China and India are building new coal-fired electricity generating stations as fast as they can despite the obvious pollution associated with burning coal. They are also constructing new nuclear power stations and an energy mix is more important to them than environmental concerns. Japan and South Korea, both Kyoto Protocol signatories, are also building nuclear plants, but they can afford the expensive environmental benefits that nuclear represents.

expertVIEW

Roger Herrera

In Africa, any rise in the price of oil for whatever reason, will be yet another disaster for a region barely out of the wood and dung fuel age. Africa does have lots of sunlight and renewable energy must be part of its future if its population is ever to thrive.

European Energy Policy largely absent

A European Energy Policy is largely absent from the European Constitution despite attempts to formalize an energy plan in that document for the whole region. The British were not willing to reduce their control of their North Sea oil and gas and it was largely British opposition that gutted the energy section of the Constitution. But one thing which is common to all European countries is the firm embrace of the Kyoto Treaty, which makes CO2 public enemy number one. The French have shamed the rest of the world with their unwavering commitment to nuclear electricity. It supplies 75 percent of their needs, but they, together with Finland, are the only Europeans who are willing to educate or ignore public opinion on building new nuclear facilities for the future.

The rest of Europe will not accept nuclear as a clean energy source and uses the unconvincing argument that the finite nature of uranium ore makes it an unacceptable choice. Germany, in particular, has disavowed nuclear because of the marriage of convenience of most of its political parties with the minority Green Party. The Green Party has demanded the phase out of nuclear power stations as part of its deal with the dominant parties and has persuaded the parliament to embrace wind power as its future clean energy source.

Germany embraces wind power

Today Germany produces a third of all the wind power in the world, but wind, nevertheless, constitutes a mere 6 percent of its electricity needs. The new generation of wind turbines are a massive 600 feet tall and while earlier versions bring back thoughts of Don Quixote in some landscapes, the latest generation monsters are very intrusive. Germany is seriously planning to grow renewable biomass as fuel sources on 15 to 20 percent of the agricultural land in the country. At the moment none of these clean, renewable energy forms are economically competitive with hydrocarbons and they are effectively subsidized, but people in Europe seem to be willing to pay the price. Gasoline in Britain presently costs between $5.80 and $6.00 per American gallon — a cost which is accepted despite the fact that most of it is composed of tax!

One cannot dismiss all the European energy plans as unsuitable for America. An obvious difference between our two continents is the laudable efficiency of public transportation in most of Europe. It makes ours look sad, and one day we will have to face up to the reality that car ownership is not a right, and that trains and busses can be made to be efficient and convenient. If Europe makes a success of its renewable energy forms, the United States can benefit from their experience, so having Europe lead the way with renewables is no bad thing.

We have been debating an Energy Bill in Congress since 1992 without a successful conclusion. Thus we have no energy blueprint to map out our future in this country. The peaking of world oil production was not part of that debate, or, more accurately, was not taken seriously in that debate. Perhaps its newly recognized importance may eventually result in a better, more realistic, Energy Bill.

Europe and America go separate ways on many issues from climate change to Middle Eastern policy, but we are marketplace competitors for oil and gas. We should therefore understand what Europe will do for its energy future. It is relevant to ours. ●

Editor's note: Roger Herrera attended a Berlin workshop meeting of The Association for the Study of Peak Oil May 25-26. See his initial impressions in the May 30 issue of Petroleum News.

CANADA

Calpine trust mulls strategy for reserves

In the wake of Calpine Corp.'s decision to evaluate the sale of its reserves in Canada, Calpine Natural Gas Trust said it will consider strategic alternatives for public unit holders in the trust. California-based Calpine is weighing the possible disposal of assets in Canada and the United States along with the restructuring of some of its power contracts from a fixed price arrangement to a capacity and variable energy agreement.

The Alberta reserves on the block include about 230 billion cubic feet equivalent of proved reserves yielding about 70 million cubic feet per day of production.

The evaluation includes Calpine's 25 percent stake in about 80 billion cubic feet equivalent of proved reserves owned by CNG Trust.

Calpine Chief Financial Officer Bob Kelley said in a news release June 10 that the company's equity gas reserves have "provided us with an attractive hedge to our fixed price contract portfolio. With a restructuring of certain of our fixed price power contracts and the potential sale of these natural gas reserves, we not only enhance our liquidity position, but we also expect to preserve the margin of our power contracts."

CNG Trust has hired independent financial advisers to help pinpoint and evaluate all potential strategic alternatives.

Those could see the trust continue as an independent entity, a potential sale or merger of the trust or other options for enhancing public unit holder value.

CNG Trust is currently producing 7,300 barrels of oil equivalent per day, above management's target for the year of 6,700-7,200 barrels per day.

—**GARY PARK,** Petroleum News Calgary correspondent

● ANCHORAGE, ALASKA

What's ahead for Alaska oil and gas industry?

Highlights from the annual Alaska Oil and Gas Association-Anchorage Chamber of Commerce luncheon June 14 with predictions of what the industry could look like in the state in 2014 (full story will be in June 27 issue).

Rebecca Watson


JUDY PATRICK

Assistant Secretary of the Interior Rebecca Watson

"As I look into my crystal ball for 2014, I see us building on the successful sale we had in the National Petroleum Reserve-Alaska," said Assistant Secretary of the Interior Rebecca Watson. She predicted "continued sales," production from NPR-A Alpine satellites, and "Northstar entering its second decade of production, Liberty oil flowing down the pipeline."

Like President Bush, the Department of the Interior believes "that energy production and environmental protection are not competing priorities. We think they're dual aspects of a single purpose — and that is to live well and wisely upon the earth," she said. So along with increasing oil and gas development in Alaska, Watson said, the future for Alaska includes "birds continuing to nest, caribou herds migrating freely and the North Slope residents continuing to hunt successfully."

Frank Murkowski


JUDY PATRICK

Alaska Gov. Frank Murkowski

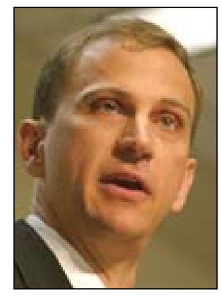
Alaska Gov. Frank Murkowski said he expects to see a gas pipeline in operation by 2014, and thinks the potential is "very strong" for spur lines to Valdez and Southcentral, and said he thinks "that you will see the state participating in the gas pipeline as an equity owner" of up to 12.5 percent, equal to state royalty gas.

On the oil side, the governor said, companies producing in the state "need to reinvest more of their profits in the state."

He predicted "a major discovery on the Alaska Peninsula," and also "a major discovery offshore of ANWR, which will require the Department of Interior to drill ANWR to prove from whose reserves" the oil is being pumped.

"I also predict major discoveries in NPR-A, and then we'll be looking at boosting the oil flow through Taps, instead of merely holding it steady."

Ken Sheffield


JUDY PATRICK

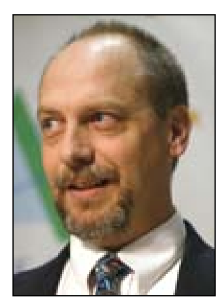
Ken Sheffield, president of Pioneer Natural Resources Alaska

Ken Sheffield, president of Pioneer Natural Resources Alaska, said he predicts "modest step-out exploration with increasing participation from the independent companies" on the central North Slope, "paced westward expansion with infrastructure" in NPR-A, low activity for the OCS and frontier basins — while the future of the Arctic National Wildlife Refuge is "in the hands of politicians. …"

On the far-fetched side of the agenda, Sheffield said that if "operators achieve a significant capital cost reduction," if "we have a period of sustain higher oil prices" and Alaska "initiates additional tax and royalty incentives" to spur development, "you could see greatly increased exploration activity, and an influx of independent operators."

Exploration wells in the state, currently some 10 to 15 a year, could increase "up to 40 or 50 wells a year."

John Barnes


JUDY PATRICK

John Barnes, Alaska asset team manager for Marathon Oil

John Barnes, Alaska asset team manager for Marathon Oil, noted the Cook Inlet only has some 10 years of natural gas supply left.

"The Cook Inlet needs a step change in natural gas exploration and development activity," he said. Companies need some certainties to make investments, he said, and while companies understand subsurface risk, accept commodity price risk and work to control project risk, Barnes said he believes "regulatory and tax uncertainties" are now "the most notable risk companies face in Alaska."

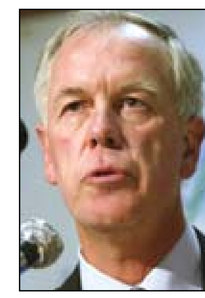
If these uncertainties can be resolved, and "if sufficient exploration occurs, and sufficient success is achieved, enough gas may be found to meet local utility and industrial demands," he said, but it will require a higher price for natural gas to attract capital.

Steve Marshall

Steve Marshall, president of BP Exploration (Alaska), talked about the success BP has had with viscous oil development at Milne Point and Orion, where "the latest well … was a quad-lateral, with four wells going off it" and "26,000 feet of reservoir contact — five miles in one well."

As for the future, the industry today is producing

> *Kevin Meyers, president and CEO, ConocoPhillips Alaska, said the potential of a gas pipeline is what is most exciting to Alaskans. The 4.5 billion cubic feet a day of natural gas coming off the North Slope will be the equivalent of 700,000 barrels per day of crude oil, he said.*


JUDY PATRICK

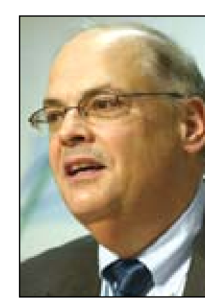
Steve Marshall, president of BP Exploration (Alaska)

50,000 bpd of viscous oil from the North Slope. "We see potential for that to triple by 2014, or maybe more." That will require an investment of some $10 billion, he said.

The industry is looking for technology to improve viscous production, he said, but capital remains an issue because of the high operating costs in Alaska, and because "capital flows to the investments with the greatest returns."

BP will continue to work the technology challenges, Marshall said, and future successes in that area will impact what North Slope activity is like in 10 years. But that future activity, he said, "depends just as much on decisions being made today in Juneau."

Kevin Meyers


JUDY PATRICK

Kevin Meyers, president and CEO, ConocoPhillips Alaska

Kevin Meyers, president and CEO, ConocoPhillips Alaska, said the potential of a gas pipeline is what is most exciting to Alaskans. The 4.5 billion cubic feet a day of natural gas coming off the North Slope will be the equivalent of 700,000 barrels per day of crude oil, he said, and "will open up a whole new business for us here in Alaska," the business of looking for natural gas.

But the financial commitment remains huge, he said, with the tariff estimated to cost shippers about $10 million a day.

ConocoPhillips is working on federal fiscal legislation, and federal enabling legislation is also required, he said, as is cost cutting and a fiscal contract with the state of Alaska.

But Alaska's fiscal gap is also an issue… if the state raises taxes, he said, "it will mean less investment, fewer jobs, less production, a poorer economy — and in the long run, less revenues for the state." ●

● LONDON, ENGLAND

BP reserves may change under U.S. rules

Company defends reserves estimates, but leaves open possibility reserves may differ somewhat when restated for SEC

By BRUCE STANLEY
Associated Press Business Writer

BP PLC on June 14 defended its method of estimating oil and gas reserves, and said that its figures would not show a "material" change when it recalculates them for submission to regulators in the United States.

However, London-based BP left open the possibility that its reserves might differ somewhat when it restates them in a filing with the U.S. Securities and Exchange Commission later this month.

Reserves are a vital asset for most oil companies, and firms have come under scrutiny for the way they estimate their reserves since Royal Dutch Shell Group of Cos. downgraded its oil holdings by 23 percent, or 4.47 billion barrels. Shell, BP's biggest hometown rival, made four separate revisions of its reserves this year, shocking the markets and forcing the resignation of several top Shell executives.

Although BP has its headquarters in the United Kingdom, it is registered to do business in the United States and must therefore file its annual financial statements and details about its reserves with the SEC. BP listed its reserves at 18.3 billion barrels of oil and oil equivalent in its 2003 annual report.

"We are confident in the reserves numbers that were booked in our UK annual report, and we are confident that these numbers are compliant with SEC regulations in all material respects," a company spokesman said, speaking on condition of anonymity.

BP regularly files with SEC

BP plans to submit information to the SEC in a document known as a 20-F. In its filing, BP will reconcile reserves currently booked under British accounting rules with U.S. standards, which analysts say are slightly more stringent.

BP has made 20-F filings for many years, but a person knowledgeable about the filings said there have so far been no differences when the company reconciled its reserves from the British accounting method to the American system.

U.S. investment bank Goldman Sachs has warned that BP's reserve estimate for the SEC might come in 3 percent lower than the estimate it made under British rules — the UK Statement of Recommended Practice.

"We don't view either base of accounting as being superior to the other. They are simply different," the bank said in an investor report it issued last week.

The bank said a 3 percent difference in reserve estimates would probably have no financial implication for BP but said that it could affect investor sentiment, given the recent uproar over Shell. It was unclear how Goldman Sachs estimated that BP's reserves might vary by 3 percent. The bank did not immediately return phone calls seeking an explanation.

Market reaction would depend on the size of any downgrade in BP's reserves, said Deutsche Bank analyst J.J.

see **RULES** *page A7*

● PARIS, FRANCE

Worldwide oil demand continues to grow

International Energy Agency ups its prediction for 2004 consumption, up 2.3 million barrels per day from '03

PETROLEUM NEWS

The International Energy Agency has revised upward its estimate of worldwide oil demand for 2004, pointing to continued strong consumption in the United States and former Soviet Union nations.

Growing demand in China also is helping to push up global oil demand, though the Paris-based agency cautioned that China's growth in oil consumption could start to slow as the government's efforts to cool its overheating economy begin to take effect.

The agency June 10 reported it expects global oil demand to average more than 81 million barrels a day in 2004 and as much as 82.6 million barrels in the heating-oil season of the fourth quarter.

This year's latest estimate shows steady growth from 2002's worldwide total consumption of about 76 million barrels per day. The revised projection pegs demand growth for 2004 at 2.3 million barrels per day over 2003, the largest single-year increase since 1980, the agency said.

In addition to heavy demand by U.S. consumers and former Soviet Union nations, the international monitoring agency said oil demand surged past expectations this spring in Brazil and India.

Increased production from the member nations of the Organization of the Petroleum Exporting Countries will help meet the growing demand, the agency said, but noted that global terrorism concerns and uncertainty over supplies have kept prices high.

"We take the commitments of these producers seriously," the agency report said of OPEC's pledge to boost production.

OPEC already producing over quota

OPEC production in May averaged 26.1 million barrels a day, almost 3 percent higher than April and about 11 percent above the cartel's official quota. The member nations have agreed to boost their quota by 2 million barrels a day to 25.5 million barrels in July and to 26 million barrels in August, but even that would be short of their actual production in May.

The question that market watchers are asking is regardless of the quota, how much can OPEC produce above its current flow to meet demand?

Most of the OPEC boost in May came from Saudi Arabia and the United Arab Emirates, the report said, with the world looking to those two and other OPEC members to increase their flows as much as possible to help hold down prices.

The International Energy Agency report noted that while OPEC production grew in May, non-OPEC flow held level — though non-OPEC production for the full year is expected to be up about 2 percent over last year. Higher production from Russian and African fields in May offset declines elsewhere in the world. ●

● CALGARY, ALBERTA

EnCana raises resource estimates, sales forecast

By DON WHITELEY

Petroleum News Contributing Writer

With its money placed squarely on unconventional natural gas and oil sands development, Calgary-based EnCana Corp. announced on June 15 that it had raised significantly both its resource estimates and its 2004 sales forecast. The largest oil and gas producer in Canada, company engineers now believe EnCana's properties contain an estimated resource of 16 trillion cubic feet, up 70 percent from a year ago. Crude oil resource estimates have been raised by 40 percent to 850 million barrels.

It is important to understand that these are resource estimates, not proven reserves, and are subject to additional work and the vagaries of oil and gas prices. Nevertheless, they indicate the company's growing asset base through both the drill bit and through acquisitions.

EnCana also raised its 2004 sales forecast to between 725,000 and 765,000 barrels per day of oil and gas equivalent, up from 650,200 boe per day in 2003. In 2005 the company expects to produce between 810,000 and 860,000 boe per day.

The company had originally forecast organic sales growth of 10 percent in 2004. But after a deeper look, EnCana hiked the organic growth rate to 12 percent in 2004, before the inclusion of the recent acquisition of Tom Brown Inc. and additional planned asset sales.

North America gas spotlight

While EnCana is active in both the North Sea and Ecuador, North America is currently in the company spotlight for both unconventional oil and natural gas development. However, EnCana continues to peddle conventional Canadian properties that produce about 35,000 barrels of oil equivalent per day.

"Our resource play strategy is delivering strong sustainable production growth," said EnCana Chief Operating Officer Randy Eresman. "Natural gas production in the U.S. Rockies is up more than 25 percent in the past year, before the inclusion of Tom Brown production. In Western Canada, gas production is gaining momentum, up about 14 percent in the past year. In-situ oil sands production continues to grow, up about 35 percent in the past year."

Eresman went on to say that the increase in the company's sales forecast can be tied directly to "strong performance from our resource plays." Already in 2004 EnCana has drilled more than 2,200 net wells on its North American properties.

Planned capital expenditures also up

And in that vein, the company has boosted its planned capital expenditures for 2004 by US$850 million, with nearly one-third of that to be spent on the newly acquired Tom Brown lands. The rest will be split among Canadian Plains, Canadian Foothills and Frontier, and other U.S. properties. The program is expected to result in about 5,000 net wells drilled.

EnCana Chief Operating Officer Randy Eresman

Growing in importance in its unconventional gas mix are two British Columbia Properties — Greater Sierra and Cutbank Ridge. Resource plays, both are "tight gas" formations with low permeability and porosity, and require costly production techniques to get the gas to flow. EnCana is counting on North America's tight supply/demand scenario to keep prices high enough to maintain economic feasibility for these plays.

Just how big it might be depends on whether you talk to the British Columbia Energy Ministry, The Canadian Gas Potential Committee, or EnCana Energy, the lead player among several companies now tapping into the play. While they may differ on the top end, all agree that it is bigger than anyone thought possible even as recently as two years ago.

"It's a huge play and it goes for hundreds of miles literally," says Mike Graham, EnCana's president Foothills region, of the greater Sierra play. "You just step out and it keeps growing. It looks like its gas charged right from the NWT right into the Rocky Mountains. It keeps growing."

EnCana bumped up resource estimates

EnCana some months ago bumped up its resource estimates on its own Greater Sierra lands, from an original 5 trillion cubic feet of gas in place and 2.5 tcf recoverable to 6.5 tcf in place and 4 tcf recoverable. Graham estimates that the entire formation could have more than 10 tcf.

Cutbank Ridge, a tight gas play near Dawson Creek, British Columbia, raised eyebrows internationally less than a year ago when EnCana laid out C$369 million for leases in the area. It contributed to a one-day British Columbia land sale that all by itself eclipsed the previous record for a full year.

In order to speed up the development of these plays, EnCana pioneered the use of wooden drilling mats that allow summer drilling on otherwise swampy terrain. In practical terms, that virtually doubled the drilling season on British Columbia plays, which had been previously limited to winter freeze-up.

"Last year, we drilled 270 net wells in B.C., or about 25 percent of the provincial total," Morgan said in a speech to the British Columbia Board of Trade. "This year, we'll do about the same."

Within five years, EnCana expects longer-life, lower-risk projects like the two British Columbia properties will account for 80 percent to 90 percent of the company's North American gas production, compared with less than 60 percent last year. ●

continued from page A6

RULES

Traynor, speaking from his office in Edinburgh, Scotland. He agreed that a 3 percent downgrade would probably have little impact. Traynor added that BP has been clear about the standards it uses to calculate its reserves.

"I don't think there's any big scandal here," he said.

BP shares fell 0.8 percent to close at 478 pence ($8.70) June 14 on the London Stock Exchange. ●

GULF OF MEXICO

Current Deepwater Activity

Operator	Area/ Block	OCS Lease	Rig Name	Prospect Name	Water Depth (ft)
BP Exploration & Production Inc.	WR 724	G17011	OCEAN CONFIDENCE	Das Bump	7,591
Shell Offshore Inc.	MC 657	G08496	R&B FALCON NAUTILUS	Coulomb	7,565
Union Oil Company of California	WR 678	G21245	DISCOVERER SPIRIT	Saint Malo	7,036
Chevron U.S.A. Inc.	WR 759	G17016	TSF DISCOVERER DEEP SEAS	Jack	6,965
BP Exploration & Production Inc.	GC 743	G15606	TSF DEEPWATER HORIZON	Atlantis(GC)	6,829
BP Exploration & Production Inc.	MC 778	G09868	TSF DISCOVERER ENTERPRISE	Thunder Horse South	6,040
Dominion Exploration & Production, Inc.	MC 734	G21778	TRANSOCEAN CAJUN EXPRESS	Thunderhawk	5,724
Dominion Exploration & Production, Inc.	MC 773	G19996	PRIDE 1503	Devil's Tower	5,610
Marathon Oil Company	AT 488	G18617	NOBLE AMOS RUNNER	Kansas 2	4,725
Spinnaker Exploration Company, L.L.C.	MC 124	G24049	GLOMAR JACK RYAN	Zorin	4,479
BHP Billiton Petroleum (GOM) Inc.	GC 653	G20084	GLOMAR C. R. LUIGS	Shenzi	4,340
Anadarko Petroleum Corporation	GC 608	G18402	NABORS POOL 140	Genghis Khan	4,287
Chevron U.S.A. Inc.	GC 640	G20082	FALCON DEEPWATER MILLENNIU	Tahiti	4,017
Anadarko Petroleum Corporation	GC 518	G21801	NOBLE PAUL ROMANO	K2 North	3,993
Eni Petroleum Co. Inc.	GC 562	G11075	GLOMAR CELTIC SEA	K2	3,933
Kerr-McGee Oil & Gas Corporation	EB 688	G09191	DIAMOND OCEAN STAR	Boomvang (East)	3,786
Shell Offshore Inc.	GC 248	G15565	NOBLE MAX SMITH	Glider	3,440
Shell Offshore Inc.	GB 516	G11528	NOBLE JIM THOMPSON	Serrano	3,392
Eni Petroleum Co. Inc.	GC 254	G08010	DIAMOND OCEAN VALIANT	Allegheny	3,225
Shell Offshore Inc.	VK 956	G06896	H&P 205	Ram-Powell	3,214
Kerr-McGee Oil & Gas Corporation	GB 668	G17408	NABORS MODS RIG 150	Gunnison	3,152
Nexen Petroleum U.S.A. Inc.	GC 243	G20051	NOBLE HOMER FERRINGTON	Aspen	3,050
TOTAL E&P USA, INC.	MC 243	G19931	SUNDOWNER XVI	Matterhorn	2,816
Chevron U.S.A. Inc.	GC 205	G05909	NABORS 85 (MAYRONNE 162)	Genesis	2,590
Walter Oil & Gas Corporation	MC 583	G16624	DIAMOND OCEAN LEXINGTON	Killer Bee	2,487
Murphy Exploration & Production Company -	MC 582	G16614	MODS 141	Medusa	2,214
LLOG Exploration & Production Company	GB 378	G24488	DIAMOND OCEAN SARATOGA	GB 378	2,044
Kerr-McGee Oil & Gas Corporation	GB 244	G15860	TRANSOCEAN MARIANAS	Basal Peak	1,946
Chevron U.S.A. Inc.	VK 786	G10944	ENSCO 25	Petronius	1,754
Westport Resources Corporation	MC 707	G25103	DIAMOND OCEAN CONCORD	Valley Forge	1,538
El Paso Production GOM Inc.	EW 1003	G13091	SUNDOWNER XI	Prince	1,490
BP Exploration & Production Inc.	MC 109	G05825	H&P 203	Amberjack	1,030

Total Deep Water Prospects with Drilling/WO Activity 32

New Deepwater Activity

BP Exploration & Production Inc.	WR 724	G17011	Das Bump	7,591
Kerr-McGee Oil & Gas Corporation	EB 688	G09191	Boomvang (East)	3,786

● ROCKY MOUNTAINS

Rockies energy firms targets for acquisition

By HEATHER DRAPER

Dow Jones Newswires

Four down, two to go?

In early June Prima Energy Corp. became the fourth Denver-based independent oil and gas producer to be acquired since April. Analysts say it illustrates again that large energy companies recognize the resource potential in the Rockies.

"It just shows you that mid- to larger-sized independents (oil and gas companies) are desperate for growth and there aren't many places left you can get it," said Dave Tameron of Stifel Nicolaus & Co. in Denver.

The Rocky Mountain region is the only area left in the continental United States that hasn't already had its natural gas resources extensively exploited, he said.

Petro-Canada, of Calgary, Alberta, agreed to pay $534 million, or $39.50 a share, for Prima.

"I think Petro-Canada overpaid, to be honest with you," Tameron said. "But I think they really wanted to expand their Rocky Mountain assets."

The deal follows the recent acquisitions of Denver energy companies Tom Brown Inc. by EnCana Corp.; Westport Resources Corp. by Kerr-McGee Corp.; and Evergreen Resources Inc. by Pioneer Natural Resources.

Patina, Western Gas may be next

The Prima acquisition June 9 turned the spotlight on the few remaining independent oil and gas-producing companies left in the Rockies. The two that Tameron thinks are next to go are Patina Oil & Gas Corp. and Western Gas Resources Inc., both based in Denver.

Analyst Stu Wagner of Petrie Parkman & Co., an energy research and investment banking firm in Denver, didn't want to guess which gas company might go next.

"As the list continues to dwindle, we believe visibility will continue to increase for both Patina and Western Gas," Tameron wrote in a research note June 10. "Both of these companies are takeout targets, and we view both as undervalued given recent transaction prices."

Tameron doesn't own shares in any of the companies mentioned and Stifel Nicolaus hasn't provided investment banking services to them in the last 12 months.

Other potential Rocky Mountain targets include Ultra Petroleum Corp. of Houston and St. Mary Land & Exploration Co. of Denver.

Analyst Stu Wagner of Petrie Parkman & Co., an energy research and investment banking firm in Denver, didn't want to guess which gas company might go next.

But he said the recent consolidation is part of an ongoing cycle in which executives of small private oil and gas firms take their companies public, build up value in the company, sell it and then look to start another private company.

"There is no doubt some of these managements (who recently sold their companies) are looking to start up private companies," Wagner said. "I would be surprised if we don't see some new private entities formed in the next six months." ●

DENVER, COLO.

Delta Petroleum, Alpine Resources reach deal on 140 Bcfe of reserves

Denver-based Delta Petroleum has agreed to buy more than 140 billion cubic feet of natural gas reserves from Alpine Resources, Delta said June 16.

Specific terms of the transaction were not disclosed, but Delta said it is paying about $1.40 per thousand cubic feet of gas equivalent for the reserves. The deal is expected to close by June 30.

Alpine's properties currently produce about 20 million cubic feet of gas equivalent per day. Alpine operates properties that account for 95 percent of proved reserves that exceed 90 million cubic feet of equivalent. Total reserves were pegged at over 140 billion cubic feet of equivalent.

About 50 percent of current daily production is natural gas and 50 percent oil, with oil representing about 55 percent of total proved reserves.

Financing arrangements are expected to include an increase in bank debt and the possible sale of non-core properties, Delta said, adding that other alternatives also are being explored.

—RAY TYSON, Petroleum News Houston correspondent

exploration&production

NORTH AMERICA

North American rig count up by 36 to 1,460 in weekly report

The number of rigs operating in North America rose by 36 from the previous week to 1,460 during the week ending June 11, according to rig monitor Baker Hughes. The overall rig count was up by 74 compared to the year-ago period.

Canada's rig count alone increased by 17 to 273 from the prior week, but was down by 42 rigs compared to the same period last year.

The number of rigs operating in the United States during the recent week increased by 19 to 1,187 versus the previous week, and was up by 116 versus a year ago.

Land rigs alone rose by 16 to 1,070 from the previous week, while offshore rigs increased by six to 98 and inland water rigs decreased three to 19.

Of the rigs operating in the United States during the recent week, 1,024 were drilling for natural gas and 162 for oil, while one was being used for miscellaneous purposes. Of the total, 744 were vertical wells, 312 directional wells and 131 horizontal wells.

Among the leading producing states in the United States, Texas gained the most rigs during the recent week, up by seven to 501. New Mexico's rig count increased by five to 71. Wyoming picked up three rigs for a total of 77, while California picked up three rigs to total 25 for the week. Louisiana's rig count increased by two to 171, while Oklahoma's was up two to 170. Alaska was unchanged at seven rigs.

—RAY TYSON, Petroleum News Houston correspondent

HOUSTON, TEXAS

Falcon acquires oil, gas mineral rights on Texas Gulf Coast

Exploration and production independent Falcon Natural Gas Corp. has acquired oil and gas minerals rights to 800 acres on the Texas Gulf Coast and is in the process of securing an additional 1,900 acres in the region, the company said June 16.

Falcon said it plans to raise additional capital in order to begin an intense exploration program on the acreage, which is scheduled to begin in the second half of this year.

Falcon's acreage is located in one of the leading natural gas producing areas of North America and consists of mineral rigs adjacent to large proven deposits. The acreage specifically is located east of the Bob West field with estimated reserves of 1 trillion cubic feet of natural gas, Falcon said. It also is situated close to the Lopeno field, which is expected to produce up to 260 billion cubic feet of gas, the company added.

The deal includes a 100 percent working interest and a 70 percent net revenue interest on the properties Falcon has acquired.

"Based on good quality seismic data and the presence of very large gas fields in the same geographic setting, the reports we have commissioned indicate that the prospect has an excellent potential of becoming a commercial gas field," said Alan Aitchison, Falcon's chief executive officer.

—RAY TYSON, Petroleum News Houston correspondent

● NORTH SLOPE, ALASKA

State releases results of ANS facility sharing study

By KAY CASHMAN

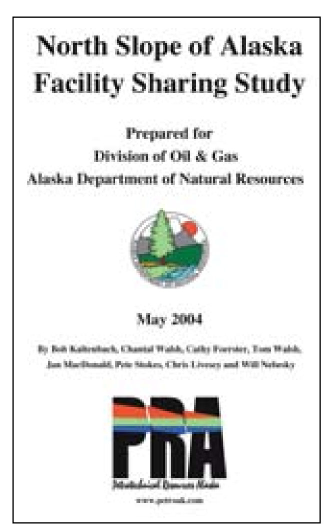
Petroleum News Publisher & Managing Editor

On June 15 the Alaska Division of Oil and Gas released the results of a study thats subject matter is considered critical to the future of oil production from Alaska's North Slope.

Conducted for the state by Petrotechnical Resources of Alaska, the North Slope of Alaska Facility Sharing Study was the first undertaking of its magnitude, producing a hefty manual that describes existing North Slope facilities and their processing potential.

1 2 SERIES

The 60-page report, with as many pages of attachments, identifies the needs and desires of both facility owners and non-owner companies interested in producing oil on the North Slope and lays the groundwork for designing a template for facility access for non-owners which benefits all parties.


North Slope of Alaska
Facility Sharing Study

Prepared for
Division of Oil & Gas
Alaska Department of Natural Resources

May 2004

PRA

Facility sharing is considered critical to the North Slope's continued oil production. Major facility owners and producers such as BP and ExxonMobil have discontinued exploration in the region, concentrating instead on technically squeezing the last drop of oil out of declining fields such as Prudhoe Bay and Kuparuk. They have instead focused their attention on exploration areas outside of Alaska, which have the potential of 1 billion barrel-plus discoveries, something geologists say is no longer likely in the areas of Alaska that are open to oil and gas drilling.

Other companies, including independent oil and gas producers, have moved in to explore the North Slope, looking for the 50-500 million barrel fields the area is still thought to contain. These new companies, referred to as potential producers or third parties in the study manual, need reasonably priced access to existing North Slope production facilities. In turn, facility owners such as BP, ExxonMobil and ConocoPhillips need to be fairly compensated for the use of their facilities and the likely temporary loss of their own production. And the state needs to keep oil production royalties and taxes high enough to avoid major fiscal deficits.

Example of Potential Costs

Although each case will have its own specifics, as an example of potential costs, a non-facility owner might expect to pay the following fees for Kuparuk River unit facilities:

Fee	Typical range	Per
Capital access	$1.00-1.80	BBL oil
Abandonment	$0.10-0.20	BBL oil
Plant liquid	$0.09-0.15	BBL liq.
Plant gas	$0.03-0.6	MCF
Drill site	$0.11-0.15	BBL liq.
Excess water	$0.04-0.07	BBL ex.wtr.
Ad valorem	$0.10-0.16	BBL liq.

Note: Backout could range from as low as 2% to as high as 50%. The Prudhoe Bay unit satellites range from 2-6%; the Kuparuk River unit satellites range from 3-30% with an average of 9%.

Lots of cooperation

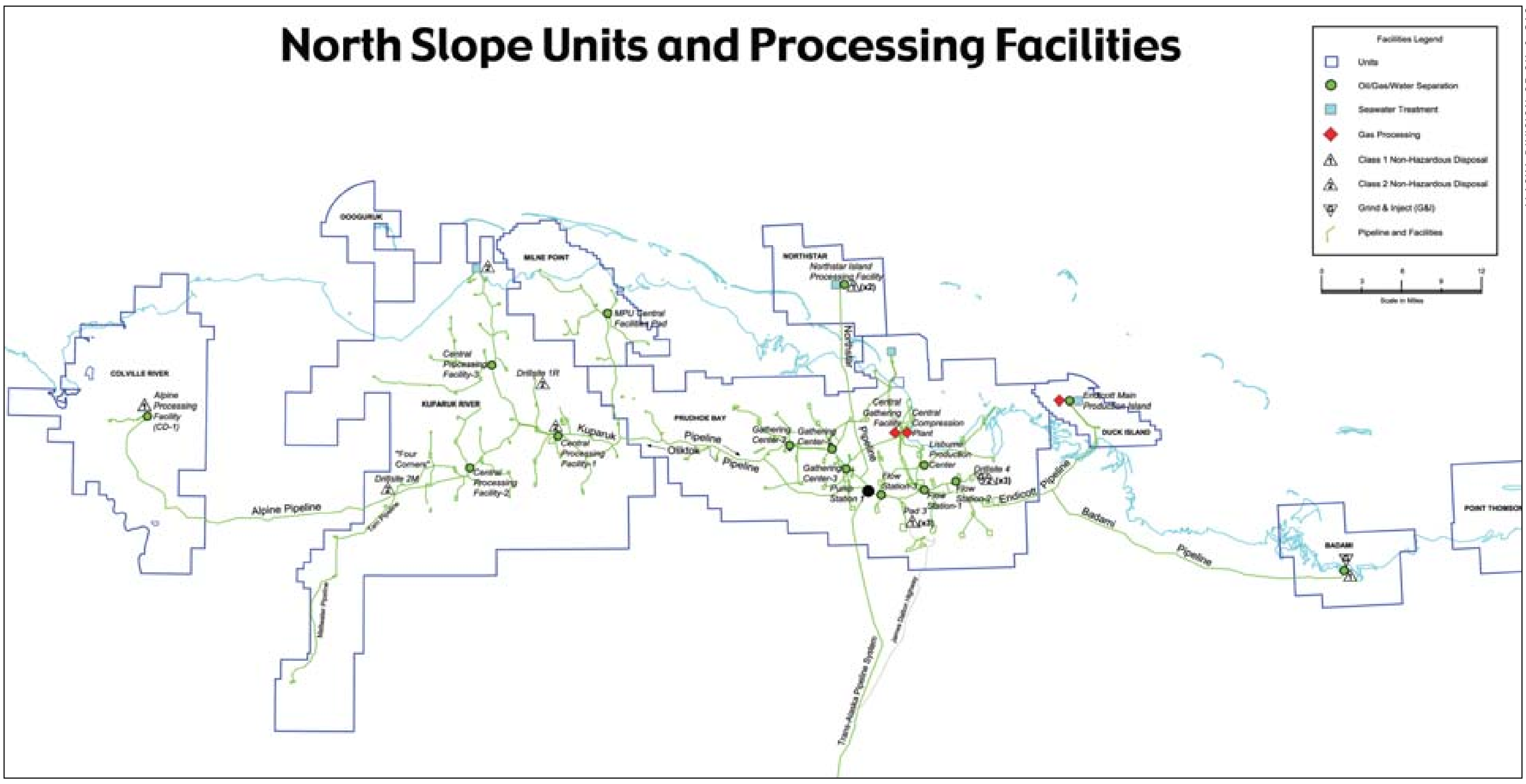
Among the companies providing information and perspectives for the pilot project were facility owners BP Exploration (Alaska), ConocoPhillips Alaska, ExxonMobil, and independents Winstar, Armstrong, Pioneer Natural Resources, Talisman (Fortuna), AVCG, Kerr-McGee and Devon Canada.

PRA's Tom Walsh said he was surprised at the amount of cooperation his firm received from North Slope facility owners, who initially expressed some concerns about the study.

"We got a lot of cooperation from the facility owners, the North Slope producers. More than we expected. We didn't get particulars on current facility sharing agreements with the exception of Ballot No. 255 for Kuparuk, but we did get the means to work that out," Walsh said.

When asked if the North Slope facility owners were initially resistant to providing information, Walsh said, "Yes, it's fair to say there were parties concerned that the state was stepping in at all and wondering what the state's role was. They got over that

see **STUDY** page A10



ALASKA DIVISION OF OIL & GAS

continued from page A9

STUDY

hurdle pretty quickly … when we made it clear that this had to be a cooperative effort or it wasn't going to happen. That really eased people's tensions."

As the study progressed, he said "it became obvious that the study was good for everyone."

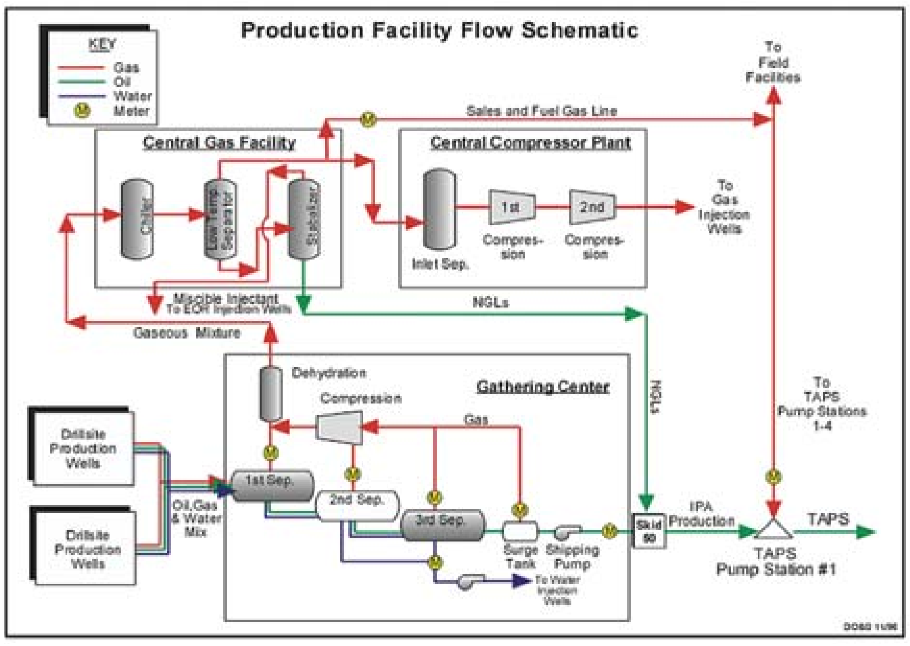
The end result, Walsh said, is, "We came up with a very factual and technical study that provides a platform for individual companies to undertake their own economic analysis."


TOM WALSH

Two individuals from the division, Bill Van Dyke and William Nebesky, worked closely with PRA on the study. Nebesky, a commercial analyst, was also pleased with the results of the study and is in the process of putting the manual on the agency's web page (http://www.dog.dnr.state.ak.us/oil/) as a set of pdf files. He said the state will also produce CDs and printed versions.

Most facilities have reached capacity for oil, gas or water

While many North Slope processing facilities have spare room for oil, water or gas handling, the study concluded that most of the facilities have reached capacity for at least one of the three. For example, Prudhoe Bay, Endicott, Kuparuk and Lisburne have room for additional oil; but all three have either reached capacity, or will soon reach capacity, for water and gas handling.



Above is a generic facility flow diagram. The manual produced by PRA with the result of the North Slope facility sharing study contains facility flow diagrams for a number of North Slope processing facilities.

As fields mature they tend to produce more water and gas than oil, Nebesky said.

The new fields that would be produced by non-facility owners, he said, would tend to produce a higher proportion of oil per barrel, thus likely necessitating backing out some of the facility owners' oil from more mature fields and, because of its higher percentage of water and gas per barrel, holding it to produce later. That could cost the facility owners a bundle of money, especially if oil prices drop in the future.

PRA's report said it was critical to reach an agreement between all parties for a "simplified backout methodology."

The report also said the state of Alaska "has options to help defray the impact of backout fees" and that implementing those options "may prove to be a decisive factor in the success of North Slope facility sharing."

Pipeline capacity also addressed

Pipeline capacity was also reviewed as part of the study. The results showed Alpine full; Kuparuk, Milne Point, Northstar and Lisburne/Point McIntyre nearly full; and Badami, Endicott and Prudhoe Bay with available capacity.

Although concrete or detailed costs were not included, the PRA reference agreement within the manual has examples of potential costs associated with facility access.

PRA also studied how facility access was managed in other oil and gas provinces and developed guidelines on how facility access for third parties might be conducted for the North Slope.

"The guiding principles from the United Kingdom (U.K.) Code of Practice and Alberta's Jumping Pound formula have much in common with the existing North Slope facility sharing agreements," the report said. "However, the U.K. and Alberta contracts provide for regulatory interdiction as needed to resolve disputes between negotiating parties."

As a result of the information and perspectives it collected over the last year from facility owners, North Slope producers and non-owner North Slope explorers, PRA said that there was "mutual benefit to the facility owners and third-party producers" to adopt "reasonable terms for facility access which are equitable and understandable."

In other mature basins, such as the North Sea, facility owners offer a ballpark figure — i.e. indicative tariff — for facility access cost to interested producers, the report said.

In its recommendations, PRA said the biggest "obstacle to successful negotiations" has been a "lack of trust" between the North Slope facility owners and non-owners. A process for third party facility access that is "fair and transparent" will help to resolve this issue, PRA said.

Further investigation and communication should be pursued

Other recommendations and conclusions from PRA included the following:

• Nearly all of the existing North Slope facilities have the potential for developing a precedent for facility sharing agreements. The potential producers should expect to be able to negotiate an acceptable agreement. But the negotiations should be initiated by the potential producers as early as possible.

• The potential producers need to provide the facility operators with a well thought out development plan with as many crude characteristics as possible.

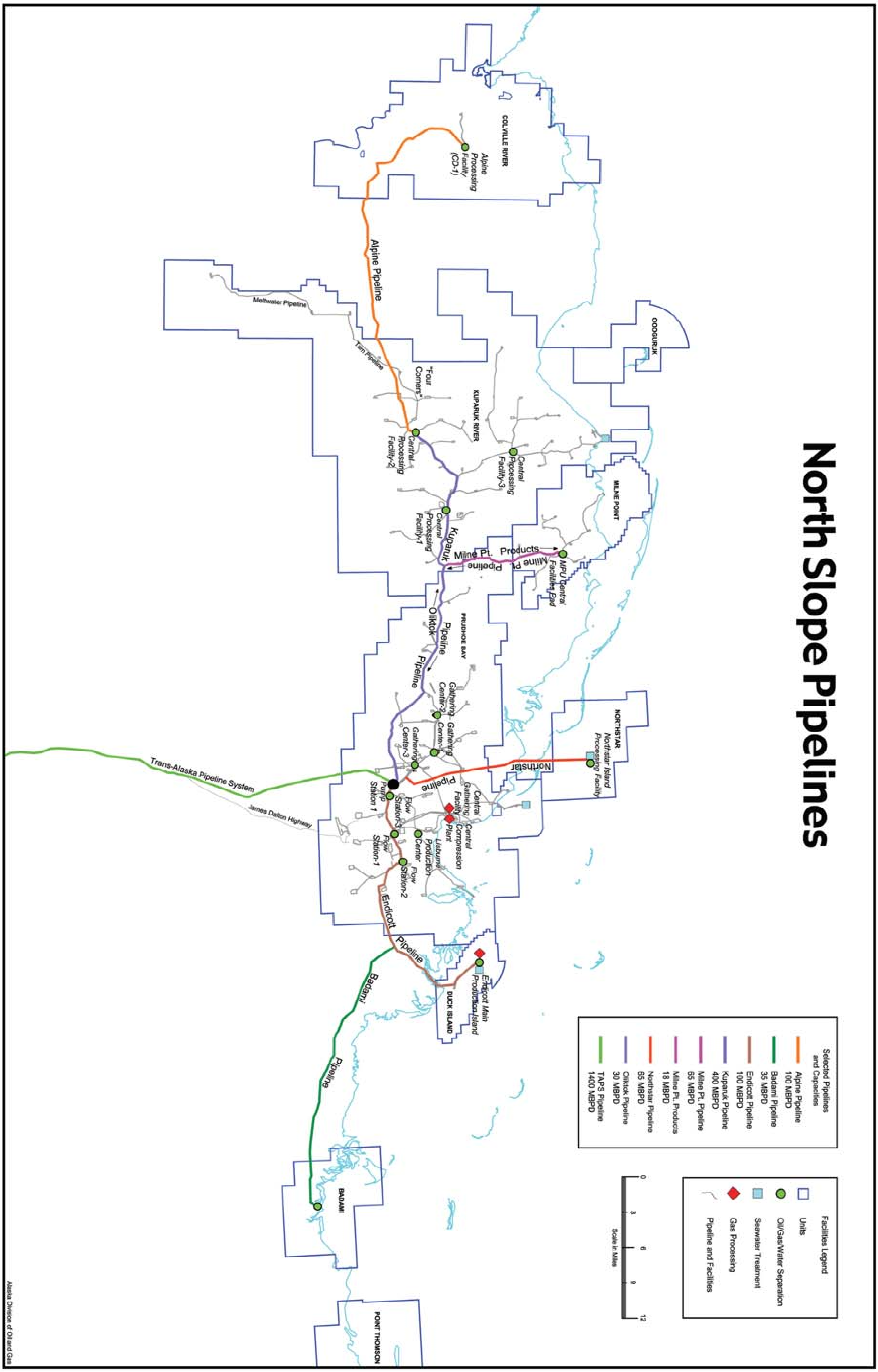
• The most critical technical issue is the calculation of the backout volumes. The operators need to communicate the backout methodology and be able to respond to requests in a timely manner.

• The potential producers need to recognize backout as a valid concept, representing real lost or deferred barrels to the facility owners.

• Both parties need to be ready to compromise on the backout methodology to simplify the calculations for fields without a detailed dynamic plant model.

PRA also recommended that "further investigation and communication should be energetically pursued to assure continuation" of the progress made by conducting the pilot study. ●

Editor's note: Watch for part two of this story in the June 27 issue of Petroleum News.


North Slope Pipelines
Selected Pipelines and Capacities
Alpine Pipeline 100 MBPD
Badami Pipeline 35 MBPD
Endicott Pipeline 100 MBPD
Kuparuk Pipeline 400 MBPD
Milne Pt. Pipeline 65 MBPD
Milne Pt. Products 18 MBPD
Northstar Pipeline 65 MBPD
Oliktok Pipeline 30 MBPD
TAPS Pipeline 1400 MBPD
Facilities Legend
Units
Oil/Gas/Water Separation
Seawater Treatment
Gas Processing
Pipeline and Facilities
Scale in Miles
0
3
6
9
12
COLVILLE RIVER
Alpine Processing Facility (CD-1)
Alpine Pipeline
Meltwater Pipeline
Tarn Pipeline
"Four Corners"
KUPARUK RIVER
OOOGURUK
MILNE POINT
Central Processing Facility-2
Central Processing Facility-3
Central Processing Facility-1
Kuparuk Pipeline
Milne Pt. Products
Milne Pt. Pipeline
MPU Central Facilities Pad
Oliktok Pipeline
PRUDHOE BAY
NORTHSTAR
Northstar Island Processing Facility
Northstar Pipeline
Gathering Center-2
Gathering Center-1
Gathering Center-3
Trans-Alaska Pipeline System
James Dalton Highway
Pump Station 1
Central Gathering Facility
Central Compression Plant
Flow Station-3
Lisburne Production Center
Flow Station-1
Flow Station-2
Endicott Pipeline
Endicott Main Production Island
DUCK ISLAND
Badami Pipeline
BADAMI
POINT THOMSON
Alaska Division of Oil and Gas

● GULF OF MEXICO

Global: No to further price cutting in U.S. GOM rig market

By RAY TYSON

Petroleum News Houston Correspondent

Oilfield service company Global Industries, which lost a chunk of money in the 2004 first quarter because of sagging rig markets, says it will no longer slash prices in the U.S. Gulf of Mexico just to satisfy operator demands and their "often onerous terms and conditions."

In a letter to its customers, Global said that due to the depressed market and operator pressures, it decided to restructure company operations and bidding practices in the U.S. Gulf. Details were not disclosed.

"As our market indicators reflect continued lack of near-term offshore construction opportunities, we must take … measures to ensure reasonable levels of profitability," William Dore, Global's chief operator officer, said June 8.

Global Industries provides pipeline construction, platform installation and removal, diving services, and other marine support to the oil and gas industry in the Gulf of Mexico, West Africa, Asia Pacific, the Mediterranean, Middle East and India, South America, and Mexico's Bay of Campeche.

Down 10 rigs from a year ago in Gulf

The number of drilling rigs operating in the U.S. Gulf stood at 95 during the week ending June 11, down 10 rigs compared to the same period last year. In contrast, the number of land rigs operating in the U.S. stood at 1,070, up 122 rigs versus the year-ago period.

Global already has transferred assets from the U.S. Gulf of Mexico to the Bay of Campeche and the Mediterranean, and the company said it would continue to redeploy assets as markets warrant.

For one, Global said it plans to submit rig day rate proposals in response to construction tenders and would selectively respond to lump-sum tenders.

Additionally, the company said it consolidated its shallow-water pipe laying division, relocated the division to Carlyss, Louisiana, and released "significant office staff and field personnel."

However, Global's diving and liftboat operations remain unchanged and based in New Iberia, Louisiana, the company said.

"We wish to thank those operators who are currently in support of ensuring the stability and availability of the construction industry," Dore said.

Took big hit in first quarter

Global took a significant financial hit in the 2004 first quarter, reporting a net loss of $8.3 million or 8 cents per diluted share. That came on the heels of a $1 million loss in the 2003 first quarter.

Revenues for the 2004 first quarter took a bashing, plummeting 43 percent to $84.8 million from $148.9 million for the same period a year earlier. The company said quarterly results were impacted by reduced activity in all of its operating areas except Latin America.

However, during the first four months of 2004, Global said it booked about $300 million of new work and that its backlog at April 30 was approximately $285 million compared to $146.9 million on the same date a year earlier.

Dore told analysts in its quarterly conference call that the company "was making many positive changes in our organization, which include streamlining operations and enhancing project execution." He said the company expected to return to profitability in 2004. ●

WASHINGTON, D.C.

DOE seeks 'small-footprint' technologies

On June 16,the U.S. Department of Energy unveiled a major new research and development initiative to develop "microhole" technologies — those that use portable drilling rigs with a smaller footprint and lower environmental impact. The program is designed to bring about faster, cheaper and safer oil and gas projects, DOE said.

The total value of the six projects is nearly $5.2 million with DOE providing $3.7 million and industry partners contributing more than $1.4 million.

The six new projects are:

- Gas Production Specialties — This project will develop technology to overcome the problems of mature, low-pressure reservoirs that have high amounts of remaining gas by using an artificial lift system consisting of pumps to produce the gas.
- Stolar Research — Researchers will develop technologies to guide the drill bit when drilling horizontal wells and transmit rock and fluid information to the surface as it is collected. Radar will be used to determine the location of the drill bit.
- Baker Hughes Inteq — The project will design and fabricate a drill bit steering device and a tool that measures the electrical resistivity of the rock. Development of these tools will provide a modular and effective coiled tubing drilling system that enables higher, more effective production from existing domestic oil fields.
- Schlumberger IPC — Researchers will develop and build a microhole coiled tubing drilling rig that is designed specifically for the abundant shallow oil and gas reservoirs found in the lower 48 states. The rig will be designed to improve the environmental and economic performance of shallow well drilling.
- Western Well Tool —The project will develop a downhole tractor tool that helps transport the drill bit and measurement tools into long (3,000+ feet) sections of horizontal wells. The tractor is expected to cost 25 percent to 50 percent less than conventional drilling methods and allow faster drilling of small-diameter horizontal sections.
- Bandera Petroleum Exploration — Researchers will develop and fabricate a drilling technique that uses a highly abrasive slurry jetting technique to drill through rock. One advantage of this technique includes faster drilling through a range of rock hardness.

natural gas

NORTHERN CANADA

Deh Cho threatens to block Mackenzie gas line if not on environmental review panel

The Deh Cho First Nations, whose land covers 40 percent of the proposed 800-mile Mackenzie Valley pipeline route, says it will block the natural gas pipeline unless it gets a seat on an environmental joint review panel. (See related story on page 1.)

According to a June 11 press release by the Deh Cho, the pipeline review agencies broke an "agreement-in-principle" reached on May 28 to include the Deh Cho "as a full party" in the joint review panel that will conduct an environmental assessment of the proposed gas line.

According to a June 11 press release by the Deh Cho, the pipeline review agencies broke an "agreement-in-principle" reached on May 28 to include the Deh Cho "as a full party" in the joint review panel that will conduct an environmental assessment of the proposed gas line.

A news release from the May meeting said, "Both sides have agreed to form a working group that will examine ways to involve the participation of the (Deh Cho) in the joint review panel." A recent news story in the Calgary Sun reported that Mackenzie Valley board director Vern Christensen said Norwegian misunderstood the intent of the working group.

"(The agreement) was an undertaking to examine ways in which the Deh Cho could participate in the process," he said. "I think the (Deh Cho) took it as a commitment when there just wasn't enough knowledge or analysis to go there."

At a follow-up meeting held June 11 in Yellowknife, "representatives of the Canadian Environmental Assessment Agency, the Mackenzie Valley Environmental Impact Review Board and the National Energy Board refused to even discuss including the Deh Cho First Nations as a party to the Joint Review Panel," the Deh Cho said in the release.

"This is a classic case of negotiating in bad faith. We had a deal with the chairs of all the review boards to appoint a technical working group to figure out how to include the Deh Cho as a full party to the environmental assessment. Our members of the technical working group went to the June 11 meeting expecting to draft an agreement based on the May 28 understanding," Grand Chief Herb Norwegian was quoted in the release.

"If the review boards sign an agreement that excludes the Deh Cho, we will be going to court. Unless the Deh Cho becomes full partner in the environmental assessment, the pipeline might as well stop at the Sahtu border," added Chief Keyna Norwegian of Liidlii Kue First Nation in Fort Simpson.

The release said court action "may include an assertion of aboriginal title and rights, as well as a charge that the review boards are failing to consider cumulative effects of the future gas fields needed to feed the pipeline over its 25-year plus lifespan."

Editor's note: The Deh Cho have refused to join other Northwest Territories aboriginal communities in the Aboriginal Pipeline Group until their land claim is settled.

—PETROLEUM NEWS

● NORTH SLOPE ALASKA

Can gas hydrates become part of North Slope gas portfolio?

Collaborative work by BP Exploration (Alaska) and the U.S. Department of Energy aimed at assessing potential of unconventional resource

By KRISTEN NELSON

Petroleum News Editor-in-Chief

Gas hydrates are the one unconventional natural gas resource that has not yet been proved economic, but a collaborative project by the U.S. Department of Energy and BP Exploration (Alaska) could move Alaska North Slope gas hydrate research into a test phase at the Milne Point unit.

But the project isn't there yet, says Bob Hunter of ASRC Energy Services. Hunter, formerly with BP Exploration (Alaska), updated the Alaska Geological Society in early May on phase 1 of the project, due for completion this October.

Phase 1 is a desktop study, he said, and only if results are positive from that phase would the study move on, with a possible test project in phase 3 in 2006.

Gas hydrates — natural gas combined with water in a clathrate structure — have been known on the North Slope since the 1970s, Hunter said, and the U.S. Geological Survey "has led hydrate research on the North Slope for over two decades."

In a spring 2004 DOE newsletter Hunter said Timothy Collett of the USGS has estimated that there may be as much as 590 trillion cubic feet of natural gas trapped in clathrate hydrates on the North Slope, with an estimated 44 tcf to 100 tcf of that resource under existing North Slope infrastructure.

While gas hydrates are not a priority for BP worldwide, Hunter told the Alaska Geological Society, BP Exploration (Alaska) is interested because of the potential for gas hydrates under existing fields.

Most technically and economically challenged

"Gas hydrates do have the best storage capacity of all unconventional gas resources, but they are also the most technically and economically challenging," Hunter told the society, and he noted they are the only unconventional gas resources not yet economic.

While gas hydrates "contain four to more than 40 times the amount of gas as seen in other unconventional gas resources," like any gas resource they

see **HYDRATES** page A16

Want to know more?

If you'd like to read more about gas hydrates in the Arctic, go to Petroleum News' Web site and search for some of the articles published on the subject in the newspaper in the last few years.

Web site: www.PetroleumNews.com

2004
- **May 30** Anadarko temporarily trims Alaska staff
- **March 28** How much is left?
- **March 7** Hot Ice finds gas, but no gas hydrates….
- **Feb. 29** Alaska on the brink
- **Feb. 15** Proposed bill would change leasing rules

2003
- **Dec. 28** Technical 'breakthrough' in hydrates turns heads
- **Dec. 14** Participants call Mallik gas hydrate well success
- **Aug. 17** 'Tis the season for drilling
- **April 27** BP quantifies gas hydrates
- **April 13** Tapping hot ice
- **April 6** Gas pipeline incentives back in federal energy bill
- **March 9** Anadarko's Arctic platform assembled, Hot Ice….

2002
- **Nov. 17** DOE funds CO2 injection research
- **Nov. 10** Hot ice project: Anadarko to core hydrate well….
- **Nov. 10** Feds hand out $1.17 million in energy grants….
- **Oct. 27** A portable exploration solution
- **Oct. 20** Anadarko cuts hydrate project back to one well
- **Sept. 15** B.C. fishermen land huge energy source
- **May 5** BP-led research project investigates gas hydrate….
- **May 5** CO2 demonstration project proposed at Milne Point
- **Aug. 4** Wainwright's coalbed methane potential huge….
- **April 21** 'Very encouraging' results from Mackenzie Delta….
- **March 10** Maurer, Anadarko to drill gas hydrate wells….

● COOK INLET, ALASKA

State gets mixed reviews on proposed Cook Inlet sale of royalty in kind natural gas

Agrium urges state to pursue sale, citing economic importance of fertilizer plant to Alaska's Kenai Peninsula

By KRISTEN NELSON

Petroleum News Editor-in-Chief

The volume of Cook Inlet natural gas is not changed by state ownership of a royalty interest, typically 12.5 percent.

But if the state sold its royalty gas, rather than accepting payment for the gas when producers sell it, the volume of natural gas available to individual customers could change.

If the state sold its royalty gas to Agrium that might help keep the Nikiski fertilizer plant open, but it wouldn't solve long-term supply problems, the Alaska Department of Natural Resources Division of Oil and Gas was told when it asked for "expressions of interest" from parties who would be interested in — or affected by — a sale of the state's Cook Inlet royalty gas.

1 2 SERIES

The state can either sell its royalty gas or take it in value; it currently takes it in value, i.e. the royalty gas is sold by producers along with their own gas, and the producers pay the state for the portion of the gas that is royalty.

Responses were due at the beginning of April, and the state received a number of them.

Mixed responses

Agrium U.S. Inc., which needs low-priced natural gas for its Nikiski fertilizer plant, and has said it may be forced to close the plant because of a decline in the gas it can purchase at industrial rates, is in favor of the state offering its Cook Inlet royalty gas for sale, as is the Kenai Peninsula Borough, home to the Nikiski plant.

Chugach Electric Association, Enstar Natural Gas and Municipal Light & Power — Southcentral Alaska's major electric and natural gas utilities — see a royalty gas sale as reducing the gas available to them, and accelerating the date at which they would need to find additional supplies. They fear such a sale would simply shift the currently short-supply of gas to their customers.

COURTESY OF AGRIUM

Agrium's Nikiski fertilizer plant

Cook Inlet's major natural gas producers — ConocoPhillips Alaska, Marathon Oil and Unocal Alaska — oppose the idea, questioning whether such a sale would be in the state's best interest and citing transportation difficulties in moving royalty gas.

Other than Agrium and the Kenai Peninsula Borough, those in favor of at least evaluating a royalty gas sale are Forest Oil, primarily an oil producer in Cook Inlet, which told the state it could use royalty gas as fuel gas at its oil production facilities, and Fairbanks Natural Gas, which ships Cook Inlet natural gas to Fairbanks as liquefied natural gas.

Economic value of Agrium

Agrium would like to buy the state's Cook Inlet royalty gas, and cited a report the company had done by the McDowell Group on the impact closing the fertilizer plant would have on the Kenai Peninsula's economy.

Since 2001, Agrium told the state, it has experienced a 30 percent decline in its production "due to an inability to secure adequate gas supply." The company said it projects it may have to close the Nikiski plant by the end of 2005 if it can't purchase enough natural gas to keep the plant running. Natural gas is the feedstock for ammonia and nitrogen, fertilizers which Agrium sells on the world market. The state's royalty gas, Agrium said, could provide "a portion of the gas" required to run the facility.

Agrium said the McDowell Group report shows an economic multiplier of more than $9 for every thousand cubic feet of natural gas consumed at the plant. Even at 2003 levels, 70 percent of capacity, the benefit of the fertilizer plant to Alaska's economy was $350 million a year, the company said. The plant accounts for more than 650 direct and indirect jobs, and more than $30 million a year in payroll.

A shutdown of the plant would increase the seasonal swing in Cook Inlet gas production, Agrium said: "This would result in additional cost to the consumer for their gas as the cost of infrastructure will then be borne by fewer customers." And with increased seasonality of gas use, money may have to be invested in storage facilities and there may be operational difficulties with wells that are shut in part of the year, both events increasing costs to consumers.

The sale of royalty gas to Agrium would also, the company said, "act as a catalyst to spur new gas development in the Cook Inlet" because it would increase the demand for gas, thus stimulating exploration and development.

If the Agrium plant is shut down, the company said, there would be decreased demand for gas, an increased available supply and "elimination of the only market accessible to new entrants."

Agrium would take all state's gas

Agrium said it would take all the state's royalty gas, but wants to be able to opt out of taking the royalty gas from some fields, such as those where it already receives the gas under its gas sales agreement with Unocal.

Agrium also said it "would expect to keep the state whole on the value it receives today" for its royalty-in-value gas, but requires a gas supply price that allows it to be internationally competitive in the fertilizer market."

The company said it believes transportation "could represent the largest impediment" to the sale of the state's Cook Inlet royalty gas, because many of the gas pipelines in the Cook Inlet basin "are not common carriers and would not be available to all potential purchasers of RIK gas on an equitable basis."

Agrium said it would seek the state of Alaska's "support in having all required lines designated common carriers in a timely manner." And, it said, it would expect that designation to have occurred before the beginning of any royalty gas sales.

If, however, the state sold royalty gas to a party other than Agrium, it "could jeopardize Agrium's existing gas supply" because the gas available to the plant would be reduced by the loss of royalty gas the company receives under its sales agreement with Unocal and would interrupt other commercial purchases the company makes.

"Both could hasten the demise of the Kenai plant," Agrium told the state.

Interest for fuel gas, LNG

The Kenai Peninsula Borough told the state that, while a royalty sale to Agrium might not solve the plant's supply problems, the borough believes "it is important that this option be fully explored through the process of a best interest finding and solicitation for offers."

see **REVIEWS** *page A15*

● ANCHORAGE, ALASKA

Gas authority to focus on spur line, LNG

Alaska Natural Gas Development Authority will share some contract work with Alaska Stranded Gas Development Act

By KRISTEN NELSON
Petroleum News Editor-in-Chief

The Alaska Natural Gas Development Authority board was told June 14 by its chief executive officer, Harold Heinze, that some of the contract work the authority has proposed to do will be done under the Alaska Stranded Gas Development Act.

Heinze said at the board's monthly meeting in Anchorage that while contracts specific to liquefied natural gas and a spur line to Southcentral should be signed off on by Deputy Commissioner of Revenue Steve Porter the week of June 21, a number of other proposals "related to business structure" and finance will be done as part of the state's stranded gas studies.

Heinze said he and Porter, who must sign off on authority contract work, have sorted out which work the authority needs to do and which work will be done as part of work for stranded gas act negotiations.

The development authority has issued contracts totaling $138,600 and most of that work has been completed.

The authority was established by Ballot Measure 3 in the November 2002 election to determine feasibility of a state liquefied natural gas project at tidewater and a spur line to bring natural gas to Southcentral Alaska.

Authority will share in stranded gas act

Of $700,000 in the authority's contracting plan, Heinze said he had "total concurrence from the administration" to move ahead with a number of contracts: liquefied natural gas plant concept design ($25,000); Yukon Pacific Corp. permit review ($25,000); spur line cost estimate ($25,000); Jones Act alternatives ($25,000); spur line rights of way and permits ($25,000); and spur line utility financing ($25,000).

Heinze said he and Porter, who must sign off on authority contract work, have sorted out which work the authority needs to do and which work will be done as part of work for stranded gas act negotiations.

Heinze said issues around business structure are questions the state is asking "in a much more general way" and so a lot of the fundamental work on business structure and finance will be part of what will probably be some major contracts for the stranded gas act negotiations. "It's not worth spending $50,000 when they will probably spend a couple of hundred thousand dollars," he said.

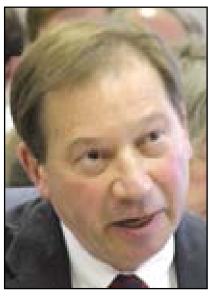
Heinze said he will have access to results of the stranded gas act studies, and "there are several things they are now looking at that I don't need to look at anymore on our own initiative and our own nickel."

Of the $700,000 in the development authority's contracting plan, $300,000 in proposed work will probably not be done by the authority because of stranded gas work.

LNG and spur line the focus

The authority will focus on a spur line to bring natural gas to Southcentral Alaska and the LNG project, Heinze said.

"Steve (Porter) and I have agreed that we're going to do everything we want to move that spur line project forward. So that is a priority," he said. "The other thing that we are also looking at is the LNG project, and those contracts that are necessary to move it forward, and the reason for that is that all that work covers both us and the port authority," so LNG studies will provide the state with information applicable to both projects.


FORREST CRANE

… the preliminary look the authority has taken at a spur line, "says we can deliver gas to Cook Inlet at today's prices; nobody else is making that promise — everybody else's promise is double," so the authority's spur line is "kind of an important option." —Harold Heinze, Alaska Gas Development Authority CEO

Board member John Kelsey of Valdez asked Heinze if he was "satisfied that there's not a bias in the stranded gas act work?"

Heinze said that if he isn't comfortable with the scope of work or the contract, he has the ability to go out on his own, and he assured Kelsey that he has "been scrupulously careful to avoid the advice of any of those that have indicated a strong bias against the LNG project."

Porter has the responsibility, Heinze said, to make sure that there isn't duplication on contracts related to the gas issue. The state is going to spend a lot of money studying overall financing issues, and the authority will be able to share the results of that work.

"But when it comes to financing the spur line I will hire my own contractor to do that work."

Spur line issues

On spur line routing issues, the development authority will focus on Glennallen to Sutton, Heinze said, because the state has on file some $1.5 million worth of work done by Mapco when it was considering a product line from Fairbanks to Anchorage. That information provides sufficient information "to define an alignment of the pipe" for that route, he said, but what is lacking is information defining an alignment from Glennallen.

Heinze said he will have access to results of the stranded gas act studies, and "there are several things they are now looking at that I don't need to look at anymore on our own initiative and our own nickel."

Heinze said there's a lot that isn't known yet about a spur line, such as whether "we have to go to Glennallen, Delta, Fairbanks or Prudhoe Bay to get the gas." The other thing that isn't known is how much gas will be needed in the future in Southcentral Alaska. But, he said, the preliminary look the authority has taken at a spur line, "says we can deliver gas to Cook Inlet at today's prices; nobody else is making that promise — everybody else's promise is double," so the authority's spur line is "kind of an important option."

And what's important to the state right now, he said, is getting the spur line project to the point where a conditional right of way could be granted.

The board reviewed a draft outline of the report required under Ballot Measure 3, which called for establishment of the authority, by Mike Powalski, hired as feasibility report coordinator. The board plans to issue the report in August, and will discuss a draft at its July meeting.

Warwick, Heyworth reelected

The board reelected Andy Warwick of Fairbanks as chairman and Scott Heyworth of Anchorage as vice chairman. The men were first elected last June at the board's first meeting.

Warwick asked if there was any concern by the board that the chairman be in Anchorage with Heinze, the authority's CEO, but that did not seem to be an issue with board members. Warwick is a former state legislator and commissioner of the Department of Administration; Heyworth led the public campaign for Ballot Measure 3.

The board also held an executive session, and Heinz told Petroleum News June 15 that the board voted to give him a 20 percent raise in base pay. Heinze was hired last summer at $78,828 a year, and told the board at its May meeting that he wanted a significant raise, citing the $175 an hour the Legislature is paying its gas line consultant and the $3,500 a day the state is paying its lead negotiator in gas line talks with North Slope producers.

Board Chairman Andy Warwick appointed board members Dan Sullivan and John Kelsey to a subcommittee to discuss CEO status and compensation. ●

continued from page A14

REVIEWS

Forest Oil said it "is not prepared at this time to discuss price provisions or other parameters" of a royalty gas sale that would "engage Forest's participation," but encouraged the state to proceed with an evaluation. Forest's interest is in gas necessary to produce crude oil.

"The availability of fuel gas, and at a price that will not adversely affect operating costs, will become an increasingly important issue regarding the producing life of the oil fields in Cook Inlet," the company said.

And Fairbanks Natural Gas, which has a small liquefied natural gas operation at McKenzie Point and sends LNG to Fairbanks by truck, said it would be "very interested in a long-term gas supply agreement" with the state, and encouraged the state "to make its gas available to in-state users." ●

Editor's note: Part 2, which will appear in the June 27 issue of Petroleum News, contains the views of Cook Inlet natural gas producers, the other industrial user, the liquefied natural gas plant at Nikiski, and area utilities.

continued from page A1

CNG

ment at EnerSea Transport LLC in Houston.

Deliveries also would occur at offshore receiving terminals, avoiding all of the community controversy of LNG regas terminal site selection, Dunlop said.

"We've been going full tilt on this about three years now," he said. And although no one has built any CNG tankers or signed up for a commercial project, the company is optimistic of future prospects, Dunlop said. EnerSea is one of several companies pursuing CNG development.

"We see CNG as being a good, regional solution" for moving stranded gas to nearby markets, he said. "We don't see ourselves as competing head to head with LNG," which can be shipped economically thousands of miles to market.

CNG carriers would store gas in rows of large pipes

EnerSea's design is comprised of rows and rows of CNG bottles, essentially large-diameter steel pipe segments. By linking the bottles, or closed pipes, into modules connected by piping, ships could be sized to meet individual market needs.

There's enough interest in the technology that gas production companies and the province of Newfoundland have joined with the Memorial University of Newfoundland to create the Centre for Marine CNG.

"It's about a month old, officially," said Jim Wright, director of major research partnerships at the St. John's, Newfoundland-based university. "The stimulus for this really came from the provincial government."

With government and private funding, the center established itself as a nonprofit corporation — the world's first research and development center for large-scale CNG marine transport and storage technology. Partners include the Maritimes & Northeast Pipeline, which went online in 1999 to move 530 million cubic feet of gas per day to New England states. The pipe carries Sable Island offshore gas from its undersea pipe landing at Nova Scotia south into Massachusetts.

Though CNG tankers could conceivably carry more than 1 billion cubic feet of gas, most expect the typical ship to hold about 700 million to 800 million cubic feet of gas, Wright said. That compares to almost 3 bcf aboard a typical LNG tanker. CNG ships probably would cost about the same as an LNG tanker, he said, which is why it's important to keep the delivery distance within an affordable range.

Short distance is best for CNG ships

For example, it would take two CNG tankers to average 500 million cubic feet of gas per day from the offshore fields east of Newfoundland to the end of the pipe system in Nova Scotia, Wright said. From there, a pipe could take the gas to U.S. East Coast markets. Shipping the gas by CNG carrier directly to Boston or New York City would take three or four ships, he said.

Anything farther could mean too much of an investment in the ships.

"For CNG, the economics are very strongly correlated with distance," said Matthew Palmer, CNG project manager for ChevronTexaco Global Gas, based in San Ramon, Calif.

LNG projects tie up 80 percent of their investment in the liquefaction and regas facilities, Palmer said. "With CNG, it's just the opposite. … You have very small investments at the two ends of the chain."

Because 90 percent of the cost of a CNG project is tied in the ships, it's essential to keep the tankers moving and making money with short deliveries instead of sailing long distances at sea as LNG tankers, he said.

And because most of the investment is in ships, not shore-based facilities, the assets could be moved to new markets to follow the need or as smaller fields stop producing.

ChevronTexaco following CNG development

ChevronTexaco believes a small, barge-mounted CNG prototype could be operational in maybe two years, but it will be 2008 to 2010 before a full-size commercial venture could get under way, Palmer said. "I would hope ChevronTexaco would be an early mover."

Although the company isn't doing its own research into CNG transport, it is following the work of others and sees possible applications in moving gas between African nations, within the Mediterranean Sea, from Caribbean production fields to U.S. markets and possibly from East Asia sources to Far East buyers.

"For CNG, the economics are very strongly correlated with distance."
—Matthew Palmer, compressed natural gas project manager, ChevronTexaco Global Gas

"The main advantage of CNG is the low cost at which it can transport gas over distances … more cost-effective than LNG," said a 2003 research paper at the University of Houston.

EnerSea's Dunlop also sees 2008 as the earliest in-service date for a full-size CNG operation. In addition to developing the loading and unloading technology, the company is working on tanker design, too.

While EnerSea said CNG might be able to compete at distances of up to 3,500 miles and ChevronTexaco's Palmer said 2,500 miles is the outer range, Wright cautions both those numbers are optimistic. "I would say under 500 nautical miles works best."

Newfoundland interested in moving its gas

Newfoundland is taking a hard look at CNG because it could help get its 10 trillion cubic feet of discovered offshore reserves to market, Wright said. Ice, remoteness and cost make it hard to build pipe from the offshore fields, he said.

Husky Energy Inc.'s White Rose field, for example, is more than 220 miles from shore. An undersea pipe to landfall would be an extremely costly proposition, the university official said.

White Rose holds an estimated 2.7 tcf of gas. Husky Energy last month asked for proposals to develop the gas field, stating that CNG transport "has potential." CNG tankers could shuttle back and forth from an offshore production platform to shore, feeding the gas into a pipeline for delivery to consumers down the Eastern seaboard.

The Sable Island fields, which are less than 140 miles from shore, use an undersea pipe to move gas to landfall. ●

Want to know more?

If you'd like to read more compressed natural gas (CNG), go to Petroleum News' web site and search for the following articles.

Web site: www.PetroleumNews.com

2004
- **June 13** The deal of last resort
- **June 6** Husky eyes Newfoundland gas from White Rose….
- **Jan. 25** New Jersey's dual-fuel cars filling up with petrol, not….
- **Jan. 11** Jurisdictional feuds slow Atlantic Canada's progress

2003
- **Dec. 14** U.S. players jettison Canadian assets
- **Sept. 28** Newfoundland explores CNG for offshore….
- **May 11** Bill to expand coal lease acreage moving

2000
- **May 28** BP Amoco executive sees natural gas-powered future

continued from page A13

HYDRATES

require a source, a reservoir system and a trap, Hunter said, although "hydrates can help form their own seal" by filling in reservoir porosity.

For hydrates to form, you need to be "within the pressure stability region" for hydrates, Hunter said: both temperature and pressure conditions are required for formation and you have to have both gas and water to form the clathrate structure.

"Gas hydrates are stable in onshore regions … mainly beneath permafrost areas where we have sufficient cooling of the geothermal gradient and pressure in the geothermal gradient to allow formation of gas hydrates," he said.

Phase 1

Phase 1 of the DOE-BP project involves characterizing the resource and reservoir fluids, primarily at Milne Point, but also includes "looking at drilling, production and completion, reservoir and petroleum engineering studies to determine reliable methods for operations within hydrates," Hunter said.

A petroleum system, industry infrastructure and access to acreage are all required for hydrate production, and in the United States those areas are the Gulf of Mexico and onshore Alaska.

"The North Slope is the premier area in the world for a gas hydrates project at this time," he said, and provides both gas hydrates and associated free gas.

But sufficient resources have to be "identified and verified" and viable production methods have to be economic.

Complete reservoir characterization important

In the DOE newsletter Hunter said results of the study so far highlight "the importance of a complete characterization of reservoir and fluid compartmentalization prior to selecting" sites for drilling or protection testing. Once initial gas hydrate/free gas plays are identified within the study area, you need "reservoir modeling evidence that depressurization of free gas zones can allow adjacent gas hydrates to dissociate at significant rates." Also needed is a laboratory method that measures "relative permeability in hydrate/sediment mixtures."

Gas hydrates at Milne Point are being studied to determine the extent of the reservoir, stratigraphy, structure, continuity, quality, variability and geophysical and petrophysical property distribution.

The Phase 1 objective is to characterize reservoirs and fluids, "leading to estimates of the recoverable reserve and commercial potential, and the definition of procedures for gas hydrate drilling, data acquisition, completion and production."
—Bob Hunter, ASRC Energy Services

The Phase 1 objective is to characterize reservoirs and fluids, "leading to estimates of the recoverable reserve and commercial potential, and the definition of procedures for gas hydrate drilling, data acquisition, completion and production."

Phase 2, November 2004 to December 2005, and Phase 3, January 2006 to December 2006, would occur if justified by the results of Phase 1, and would integrate well, core, log, and production test data from additional wells.

"Ultimately," Hunter said in the DOE publication, "the program could lead to development of a gas hydrate pilot project in the Milne Point area, and the determination of whether or not gas hydrates can become a part of the ANS gas resource portfolio." ●

Companies involved in North America's oil and gas industry

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

Petroleum news

Business Spotlight

By PAULA EASLEY

COURTESY PHOTO

Daniel C. Huston, vice president

Hunter 3-D Inc.

Hunter 3-D, located in Houston, Texas, was founded by Dan and Holly Huston in 1996. It provides superior, state-of-the-art geophysical services. Recent projects include 3-D AVO analysis, 3-D seismic inversion, and 3-D grav/mag analysis. Its Web site is www.hunter3dinc.com.

Riding out the 1964 Alaska earthquake intrigued Dan enough that he pursued the geophysics field. He worked as a surveyor on the trans-Alaska pipeline for five years and in 1981-83 he worked for the U.S. Minerals Management Service in Anchorage. While obtaining his masters in geological sciences at the University of Texas, Austin, Dan participated in Project SEER, an industry-sponsored research consortium. Later he spent 9 1/2 years as a Unocal geophysicist. Dan and Holly will spend time this summer at their Wasilla, Alaska, cabin.

FORREST CRANE

Michelle Quinn, executive administrative analyst

Carlile Transportation Systems

Carlile Transportation Systems is one of Alaska's largest motor carriers and a full-service logistics company with air, rail, road, and water carrier partners throughout North America and beyond. Alaska owned and operated, the company is committed to providing the best possible logistics services to, from and within the state.

Michelle Quinn joined Carlile nine-plus years ago, moving from the file room to billing, customer relations, and to her present position in 2001. Off the job she helps manage Alaska Forklift Services with husband Steve and gives him rowdy support at North Star Speedway. A favorite trip was driving to Alaska from the East Coast with Steve, an overloaded car and two dogs. Even during a blinding blizzard, turning back was not an option.

continued from page A1

CHEVRON

mitted to Canada," he said. "We have activities and strong interests in Atlantic Canada, offshore Newfoundland, Nova Scotia, the Delta, and oil sands, and we're still very much interested and active in a number of areas."

Pommer said the newly acquired delta properties are only five kilometers west of a well — Ellis I-48 — that was drilled with partners last winter. Asked if the results of that well triggered the bids, Pommer said the well was "tight" and would offer no further details.

Petro-Canada also a prominent bidder

Petro-Canada also played a prominent role in the lease sale, snaring more than 27,000 hectares of leases in the Mackenzie Valley.

Company spokesperson Susan Braungart said the company's expenditures remained "confidential," but the Directorate's website says Petro-Canada has committed to spend C$22 million on the leases.

"Before this purchase, we had 76,000 net acres (30,769 hectares) in the Colville Hills area," she said. "This purchase of 27,488 hectares adjacent to those holdings means we now hold 58,257 hectares."

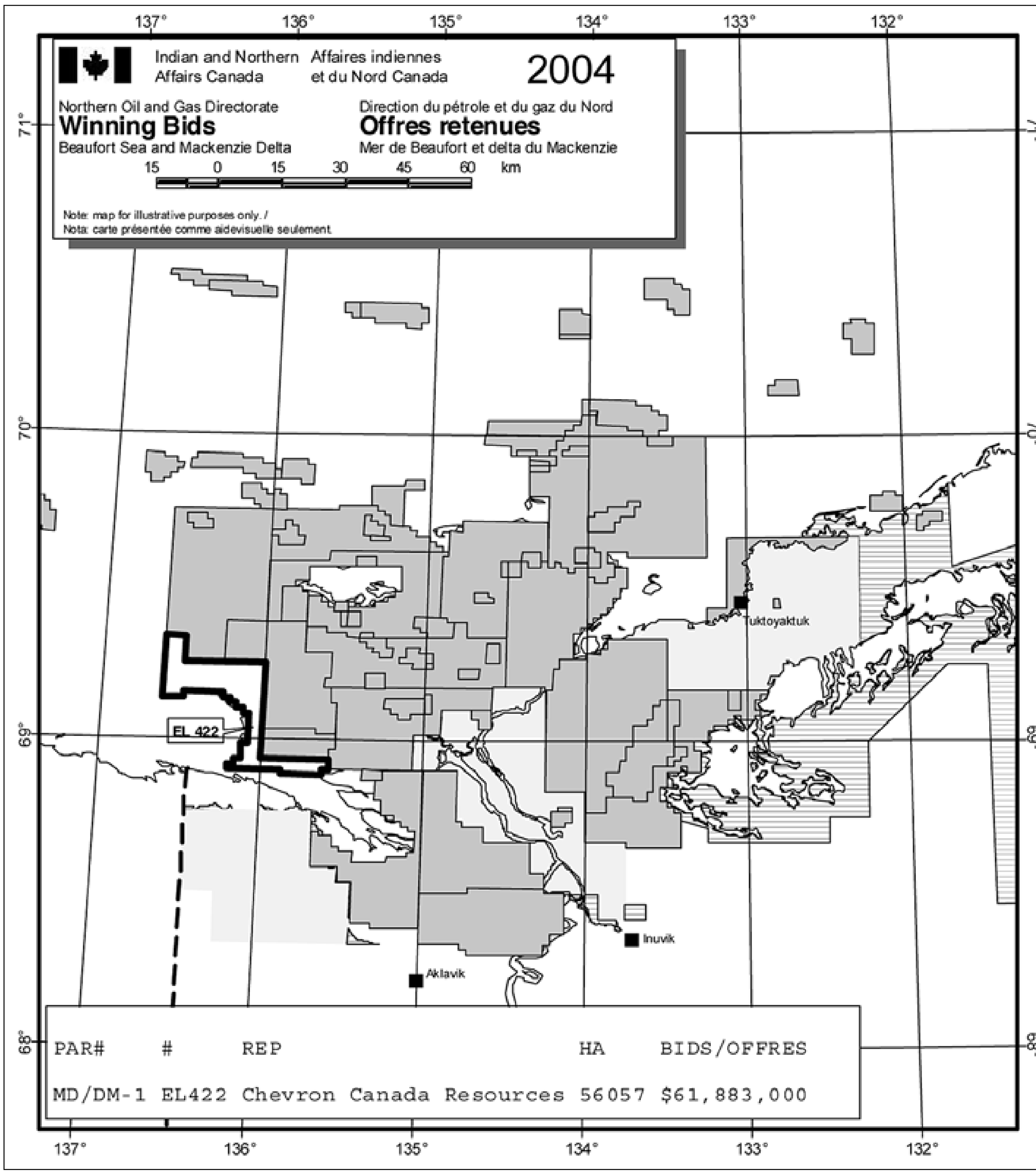
Braungart said the company will evaluate the properties this summer before outlining a work program for the following winter season.

"The north is one of our key areas, and this is a long term growth area for us, "Braungart said. "We want to take advantage of the pipeline when it is built."

All the agreements with Indian Affairs and Northern Development specify that the work will be done within five years, closely paralleling the timeline for completion of the $3 billion Mackenzie pipeline in 2009.

Other successful bidders include Northrock Resources, Husky Oil, EOG Resources, International Frontier Resources, Pacific Rodera Energy, Paramount Resources, and Apache Canada.

The new entrants are all outside the original Mackenzie sponsor group, consisting of Imperial Oil, Shell Canada, ConocoPhillips Canada and ExxonMobil Canada. Those companies have discoveries from the 1970s they'd like to tie in first.



Deh Cho threaten to go to court

Meanwhile, there may be trouble on the pipeline front, as the Deh Cho First Nation is threatening to go to court if it is excluded from a panel reviewing environmental issues around the pipeline. Grand Chief Herb Norwegian insists the Deh Cho have two seats on the joint review panel.

Discussions about the Deh Cho's involvement broke down more than a week ago when it appeared to Norwegian that the government was backing away from that commitment.

"It was a gentlemen's agreement and obviously these people weren't gentlemen when they came to the table," Norwegian told CBC News. "We need to look for some other arrangements on how we can move this whole process forward. They leave us no room to maneuver in that we have to seriously look at court action."

About 40 percent of the pipeline passes through Deh Cho territory, and Norwegian believes the environmental panel offers the only opportunity for the Deh Cho to have any say in how the project develops. ●

continued from page A1

GASLINE

"The application for the Mackenzie is enormous," Williams said in a Calgary Sun story.

"Through more than two years of project development and field work, comprising more than 1.3 million work hours, we have not had a single recordable injury," he said. Additional geotechnical work was completed this past winter in the Gwich'in region and the K'hasho Got'ine district in the Sahtu region.

To "build and maintain significant aboriginal direct involvement" with the Mackenzie project more than 600 meetings were held by the end of 2003, Williams said.

The last and most recent was on June 3, when the draft environmental impact statement terms of reference were issued by regulators, with comments due back from stakeholders by mid-July. (See related story on page 13 of this issue.)

"We expect to have the final terms of reference by the end of July," Williams said.

continued from page A3

HOUSE

sideration today and we're back at the drawing board."

Many coal worker benefits are currently paid by the Combined Benefits Fund, which Congress created in the early 1990s to cover a combination of old agreements between UMWA and coal companies.

The fund is supported by coal company contributions, but those haven't been high enough to keep up with costs. Congress paid $34 million into the fund last year to keep it afloat.

Congress has also allowed benefits to be paid with money from another fund — one set up to pay for cleanup of abandoned mine lands using industry fees. But Congress only allowed that fund to support benefits for "orphaned" miners — those whose former employers no longer exist. Miners want interest on the abandoned mine lands money to also prop up the Combined Benefits Fund.

ANWR revenues could help do that, Kennedy said.

"All the stakeholders have a big incentive to come back to the table," he said.

Roberts seemed to hold out hope for that. "As you know, we have not been reluctant to support ANWR bills in the past," Roberts wrote, "and we certainly have vigorously supported (abandoned mine lands) reform in this session of Congress."

Reps. Nick Rahall, D-W.V., and Robert Ney, R-Ohio, have introduced legislation that would allow transfers from the Abandoned Mine Lands Fund to cover any shortfalls in the miners' Combined Benefit Fund. The UMWA backs that bill. But the language added to the ANWR bill was too uncertain, Roberts said.

"If companies are to be relieved of liability, there must be provisions to guarantee that the beneficiaries will continue to receive their health benefits," he wrote.

Rep. Don Young, R-Alaska, agreed that the Senate probably wouldn't take up the ANWR bill if it passed the House. He said it was worth passing anyway for the statement it makes.

He said he hadn't been involved in the redrafting of the bill to include the coal miner benefits.

—THE ASSOCIATED PRESS

continued from page A3

TARIFFS

The commission, which is mandated by state statute to keep oil and gas transportation rates "just and reasonable" for both the owners and the shippers, ruled in November 2002 that the 1986 TAPS settlement methodology allowed for excessively high rates. RCA said that rates charged between just 1977 and 1996 provided TAPS carriers "with the opportunity to recover $9.9 billion more than the reasonable cost of providing service."

The commission said maximum rates filed by the carriers for intrastate service from 1997 through 2000 exceeded cost-based rates by an average of 57 percent.

In its June 10 order, RCA said that the current rates "will be permanent for 2001, 2002, 2003, 2004 and the future until we approve revised rates pursuant to AS 42.06." Those rates are: GVEA $1.25, Petro Star $1.96, and Valdez $1.96.

In comparison, the highest rates charged by any carrier came from BP: $1.56 (GVEA) $2.45 (Petro Star) $2.46 (Valdez). And the lowest rates came from Unocal: $1.18 (GVEA) $1.87 (Petro Star) $1.88 (Valdez).

Unacceptable methods used for test year

In its order the commission said the carriers' filings do not justify their proposed rates and that most of the carriers used "unacceptable methods to normalize the test year we directed them to use."

The order said the carriers had averaged costs over "selected years … not a reasonable method for normalizing the test year." It also noted that the carriers included recoverable costs that were "not likely to recur annually" and should instead be "amortized over a reasonable period."

For example, the TAPS carriers paid $7.7 million to repair damage to the pipeline caused by the 2002 Denali earthquake. The carriers included that amount in the test year rather than amortizing the costs associated with repairs, despite the fact that a carrier witness confirms that the pipeline is designed to withstand this type of earthquake and that over the last 23 years only three other earthquakes between 6.7 and 7.3 have occurred.

The carriers also paid $4.3 million to resolve a civil suit related to a pipeline visitor center and included it in the cost of service.

The commission concluded that while this may be a "cost of doing business that management might approve, it is not reasonably necessary to the shipment of oil on TAPS and should not be included in cost of service."

RCA's order also said, among other things, that the carriers "failed to meet the standard of proof for affiliated transactions," including not adequately supporting Alyeska affiliate costs and owner direct affiliate costs.

"When affiliated companies providing services to pipeline carriers are also producing companies that pay royalties and taxes, public policy considerations require that we closely examine affiliated costs," the commission said. "Higher pipeline transportation costs on TAPS result in lower taxes and royalties for the TAPS carriers' affiliates and also may create an economic barrier for shipping by unaffiliated shippers who cannot reap these ancillary benefits. The TAPS carriers therefore may lack incentives to insure that affiliated costs are reasonable."

The TAPS carrier-owners named in RCA's order are Amerada Hess Pipeline, BP Pipelines (Alaska), ExxonMobil Pipeline, Phillips Transportation (Alaska), Unocal Pipeline and Williams Alaska Pipeline.

Since the June 3, 2003 filing ownership has changed. Current owners are: BP Pipeline (Alaska), Phillips Transportation Alaska, ExxonMobil Pipeline, Koch Alaska Pipeline and Unocal Pipeline.

The pipeline owners are appealing the November 2002 order in state Superior court.

Williams and Tesoro Alaska Co. started the case when they filed a complaint with the RCA in 1997, alleging they were charged too much to move oil to their Alaska refineries.

Pipeline owners collect about $1 billion a year in tariffs on North Slope oil, more than 90 percent of which is shipped aboard tankers to West Coast refineries. The rest is processed instate and subject to RCA rulings.

The average tariff for interstate shipments in the past fiscal year was about $3.25 per barrel.

Prompted by RCA's 2002 ruling, Alaska Attorney General Greg Renkes and the pipeline owners signed a memorandum of understanding Jan. 22-23, calling for negotiations to renegotiate the tariff structure, starting this past February. They said the talks could take as long as two years.

The memorandum says negotiations will cover the tariff structure for interstate and intrastate shipment of North Slope oil.

Any reduction in pipeline tariffs could be a plus to the state treasury, with lower transportation costs resulting in higher wellhead values and larger production tax and royalty payments to the state based on those higher values.

Advocates of lower tariffs also say it could encourage additional oil development by lowering the cost for new entrants on the North Slope.

"Tariffs have been a controversial and litigated topic throughout the (pipeline's) life," the memorandum says, explaining that a negotiated settlement is preferable to fighting the issue before regulatory agencies and eventually in court.

The state and pipeline owners will not negotiate an actual tariff but rather a method for calculating the tariff, which would then be subject to approval by the Federal Energy Regulatory Commission, which regulates interstate oil pipeline tariffs, and RCA for in-state deliveries of oil.

—**KAY CASHMAN,** Petroleum News publisher & managing editor

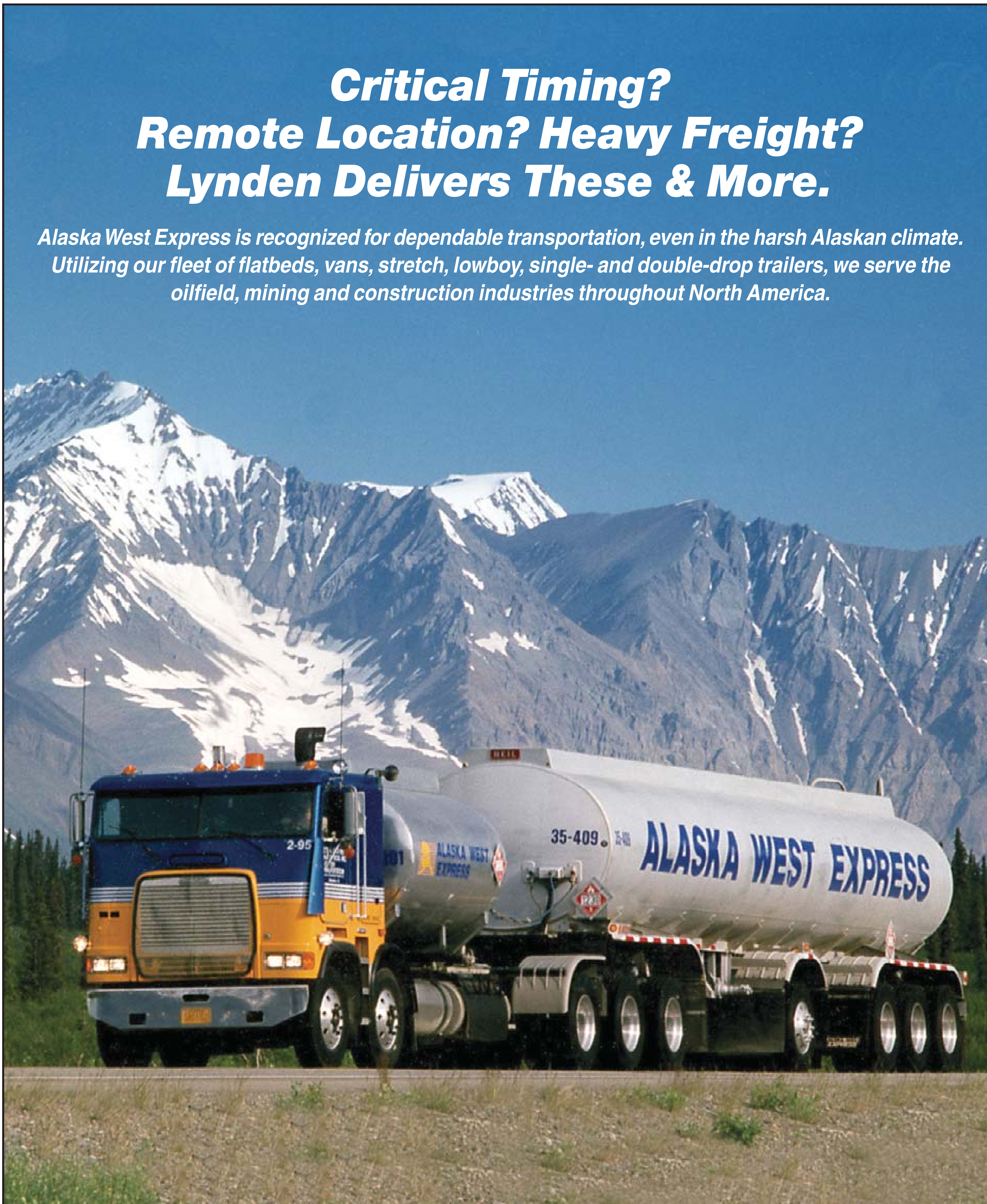
Want to know more?

If you'd like to read more about the trans-Alaska oil pipeline tariff, go to Petroleum News' web site and search for these articles:

Web site: www.PetroleumNews.com

2004
- **Jan. 25** The North Slope: A geologist's dream, an investor's nightmare

2003
- **Oct. 19** Alaska Superior Court rejects state's request for stay in TAPS tariff case
- **Oct. 12** State talking about tariff with TAPS owners
- **April 6** Alaska bound by TAPS settlement, can't lower tariff….
- **March 23** Oil Patch Insider: Governor to meet with ANS producers … about … TAPS tariff



LYNDEN

Logistics Services • E-Commerce Services • Bulk Chemical Transport • Heavy Equipment Transport
Alaska Barge & Steamship Service • Alaska LTL & Truckload Freight • Worldwide Air Cargo Charter
International & Domestic Air Freight Forwarding • International Ocean Freight Forwarding

ALASKA MARINE LINES | ALASKA WEST EXPRESS | LYNDEN AIR CARGO | LYNDEN AIR FREIGHT | LYNDEN INTERNATIONAL (A Division of Lynden Air Freight, Inc.) | LYNDEN LOGISTICS | LYNDEN TRANSPORT

www.lynden.com

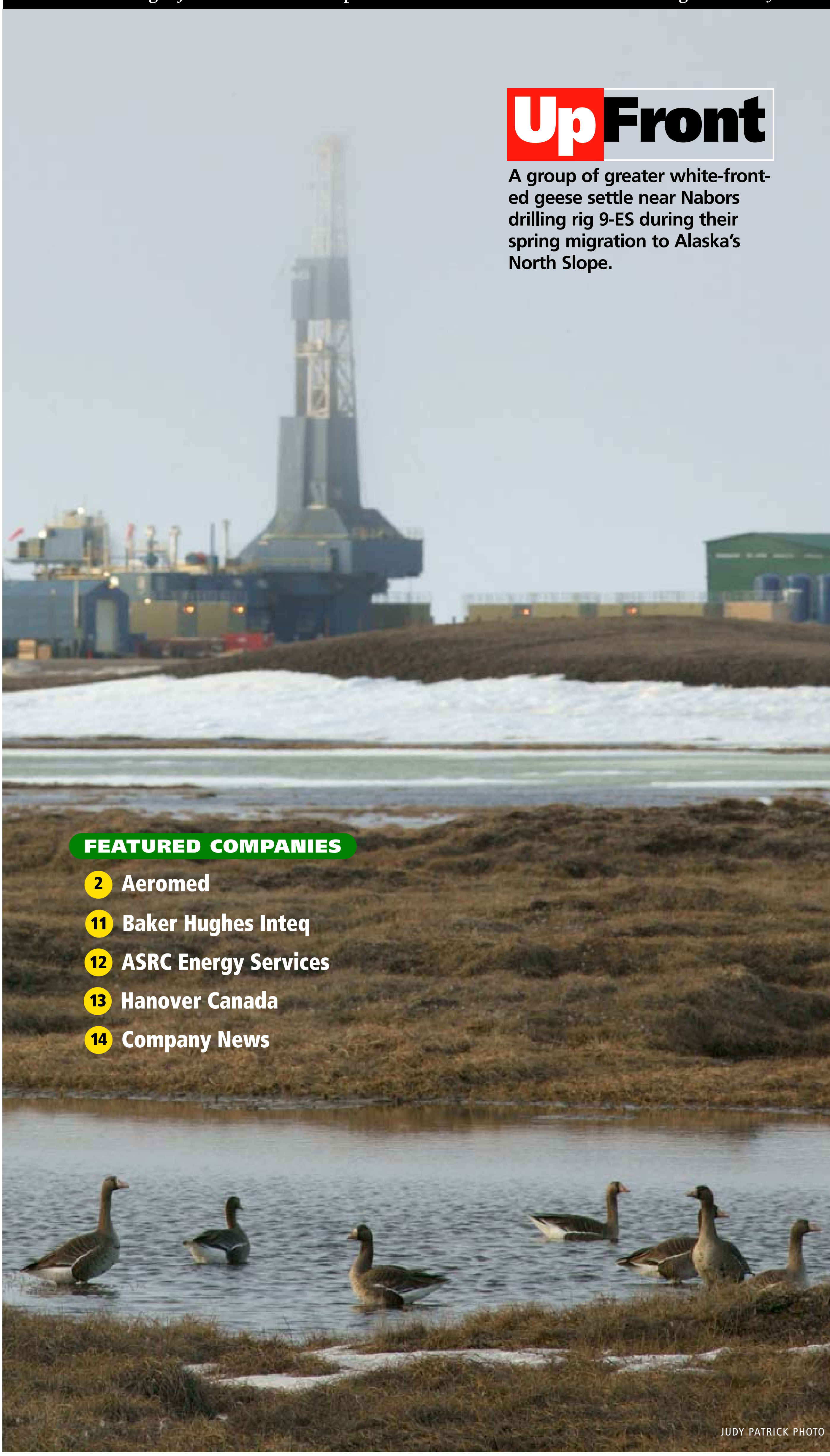
The Lynden Family of Companies

1-888-596-3361

Innovative Multi-Modal Transportation Solutions

Petroleum DIRECTORY

Providing information about companies that serve North America's oil and gas industry



UpFront

A group of greater white-fronted geese settle near Nabors drilling rig 9-ES during their spring migration to Alaska's North Slope.

JUDY PATRICK PHOTO

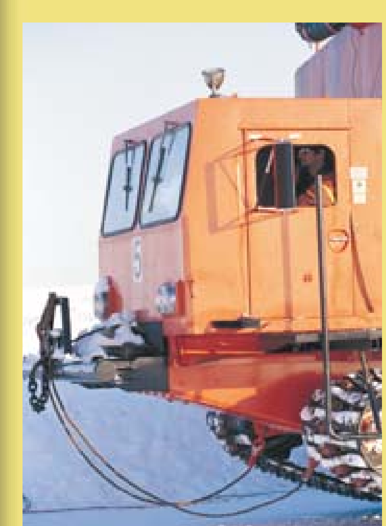
FEATURED COMPANIES

B section

www.PetroleumNews.com

ALASKA

CANADA



CONTINENTAL U.S.

Petroleum news

Volume 9, No. 25

June 2004

Aeromed's vital air ambulance service

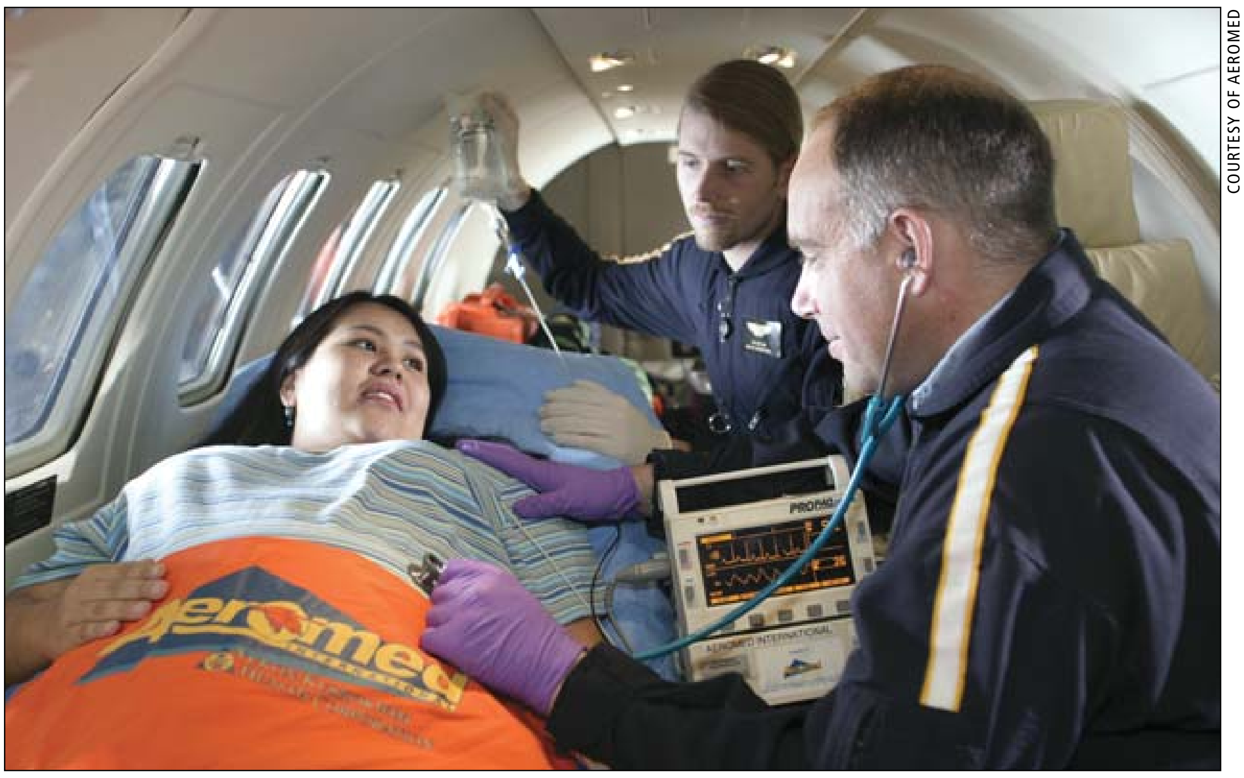
Speed and efficiency become of paramount importance in life-threatening situations

By ALAN BAILEY

Petroleum Directory contributing writer

In Alaska's vast territory the air ambulance has become a critical component of health services — if someone falls seriously ill or suffers a major injury, air travel often provides the only means of timely access to hospital care. Anchorage-based Aeromed International has built a successful business to meet this vital air ambulance need, with critical-care air ambulance services in Alaska and between Alaska and the rest of the world.

Aeromed was formed in 1997 and is a department of the Yukon Kuskokwim Health Corp., a member of the Alaska Native Tribal Health Corp.



COURTESY OF AEROMED

Aeromed was formed in 1997 and is a department of the Yukon Kuskokwim Health Corp., a member of the Alaska Native Tribal Health Corp. The formation of Aeromed stemmed from the need to transport patients from the Yukon Kuskokwim Delta region to hospital in Anchorage.

Origins

The formation of Aeromed stemmed from the need to transport patients from the Yukon Kuskokwim Delta region to hospital in Anchorage.

"What we did prior to 1997 was we used Alaska Airlines (from Bethel) for a lot of our patient transfers — we would buy three rows of seats (in a scheduled flight)," Brooks Wall, director of Aeromed, told Petroleum News.

In 1997, as a consequence of the ValueJet Crash in Florida, the FAA tightened the rules for carrying oxygen on aircraft. Consequently the Yukon Kuskokwim Health Corp. found that it could no longer transport patients on scheduled passenger flights. So, to ensure that patients could continue to fly from Bethel to Anchorage and to provide air ambulance services within the Yukon Kuskokwim Delta, the corporation decided to establish its own air ambulance service — Aeromed came into existence.

Steady growth

Since its creation Aeromed has expanded into a major operation handling about 550 missions per year in the Yukon Kuskokwim Delta and about 950 missions per year to and from Anchorage.

The company's Aeromed Delta branch uses a dedicated Cessna Grand Caravan, operated by Grant Aviation, for ambulance services between Bethel and rural villages in the Yukon Kuskokwim Delta. The Grand Caravan can easily operate in and out of the small gravel airstrips in the villages.

COURTESY OF AEROMED

Aeromed has equipped all of its aircraft as fully operational air ambulances with the life-support technology that is needed for a successful patient transfer.

"That's how we usually evacuate seriously ill patients out of the villages and get them into Bethel," Wall said.

If there's a medical condition that the hospital in Bethel can't handle, Aeromed's Anchorage branch transfers the patient by jet aircraft to Anchorage or elsewhere — the Anchorage branch uses two Lear 35A jets and one Citation II jet operated by American Air Network Alaska Inc.

"We staff two of the jets 24 hours a day, seven days a week year round, with the capability of staffing the third jet when we need to," Wall said.

As well as flying patients from Bethel, Aeromed's Anchorage branch provides service for other tribal health regions throughout Alaska.

"There is a contract that we have with the Alaska Native Tribal Health Consortium to provide service to all the other members of the consortium," Wall said.

Specialized aircraft

Aeromed has equipped all of its aircraft as fully operational air ambulances with the life-support technology that is needed for a successful patient transfer.

"What we provide is critical care — you're talking about an intensive care unit type setting ... in the aircraft," Wall said.

Specially trained nurses and paramedics attend to patients during flights.

"We have eight full-time flight paramedics, eight full-time flight nurses and then we have backup people ... that we keep with us," Wall said. Backups consist of five additional nurses and four or five paramedics, he said.

Rapid response

With speed being so critical to saving a patient, Aeromed takes great pride in launching its missions rapidly. As an independent operator, Aeromed can muster its crews without having to pull people from other duties — that gives the company a great advantage in achieving optimum response times.

"Everybody says that they have the doors sealed in the aircraft in 45 minutes (from a call) — our door seal times are averaging ... about 38 minutes," Wall said. "Our medical crews and flight crews are totally dedicated 24 hours a day, seven days a week ... our medical staff doesn't work in a hospital. The pilots aren't on call to do anything else — they're totally dedicated to this service."

And Aeromed isn't tied to one particular hospital, so that the company can ferry a patient to any hospital in Alaska or in the Lower 48, Wall said.

A challenging business

Achieving rapid response times in the unpredictable world of medical emergencies does bring some business challenges — it's necessary to balance the need for adequate service capacity at peak demand with the need for cost efficiency.

"In our business it's usually either feast or famine," Wall said. "We'll maybe sit around for a couple of days and do absolutely nothing and then all hell will break loose," Wall said.

The jet aircraft, for example, require enough pilots for a day-and-night shift system and to ensure that pilots are always available.

"It's much different from a corporate type of operation where your pilots are on call and you may have (just) ... a captain and a co-pilot for a corporate jet," Wall said. "... for these (air ambulances) you're basically four captains and four co-pilots per aircraft."

Ensuring payment for services when dealing rapidly with a medical emergency presents another challenge. Emergencies can't usually wait for insurance and other payment arrangements to be completed but the company does need to be paid so that it can continue in business.

"Everything happens after the fact," Wall said. "It's very rare that you can get everything agreed and approved beforehand because it's an emergency situation when people call and need help."

The vagaries of Alaska weather add to the difficulties of operating an air ambulance service in the state. Although a medical emergency may generate pressure to conduct a flight, safety must take priority when weather conditions make access to an airport dangerous.

"We depend on our pilots to make really good decisions about whether you can or you can't perform a mission," Wall said. "We work very hard with them to divorce them from the medical situation ... if it's not safe then we don't do the patient or ourselves any good to go out and try to land somewhere."

International operations

In addition to providing services within Alaska and from Anchorage to the Lower 48, Aeromed has expanded into international medevac services for a variety of customers.

"We've done some transports from Russia and some from Japan and Korea," Wall said.

Wall sees opportunities to further expand these international operations, including the potential to partner with air ambulance operators in the Lower 48 — Anchorage provides an ideal location for an international medevac hub.

"If a call came in we could launch almost immediately out of Anchorage and in the meantime the (partner) company would be en-route up to Anchorage," Wall said. "We could pick the patient up and bring them back here and ... transfer the patient (to the other carrier) right here in Alaska. It would save time for the patient and save expense."

Business expansion

Wall also sees opportunities to support new industrial customers, perhaps from the Alaska oil and mining industries.

"We are interested in contracting with some of these companies ... to take care of their medical transportation," Wall said.

Aeromed's extensive Alaska experience, efficient services and worldwide reach can really help industrial customers, Wall thinks. But Wall's positive outlook on Aeromed doesn't just stem from the company's flourishing business. He finds the air ambulance business very satisfying because it involves saving or improving people's lives.

And perhaps this impact on people is what really matters. ●

Editor's note: Alan Bailey owns Badger Productions in Anchorage, Alaska.

Companies involved in North America's oil and gas industry

A

Aeromap
Aeromed
AES Lynx Enterprises
Agrium
Air Logistics of Alaska
Alaska Airlines Cargo
Alaska Anvil
Alaska Coverall
Alaska Dreams
Alaska Interstate Construction
Alaska Marine Lines
Alaska Massage & Body Works
Alaska Railroad Corp.
Alaska Steel
Alaska Tent & Tarp
Alaska Terminals
Alaska Textiles
Alaska West Express
Alaska's People
Alliance, The
Alpine-Meadow
American Marine
Anchorage Hilton
Arctic Controls
Arctic Fire & Safety
Arctic Foundations
Arctic Slope Telephone Assoc. Co-op
ArrowHealth
ASRC Energy Services
ASRC Energy Services
Engineering & Technology
ASRC Energy Services
Operations & Maintenance
ASRC Energy Service
Pipeline Power &
Communications
Avalon Development

B-F

Badger Productions
Baker Hughes
Brooks Range Supply
Capital Office Systems
Carlile Transportation Services
Carolina Mat Co.
CH2M Hill
Chiulista Camp Services
CN Aquatrain
Colville
Conam Construction
ConocoPhillips Alaska
Craig Taylor Equipment
Crowley Alaska
Cruz Construction
Dowland - Bach Corp.
Doyon Drilling
Dynamic Capital Management
Engineered Fire and Safety
ENSR Alaska
Epoch Well Services
Era Aviation
Evergreen Helicopters of Alaska
Evergreen Resources Alaska
Fairweather Companies, The
FMC Energy Systems
Friends of Pets
Frontier Flying Service
F.S. Air

G-M

Golder Associates
Great Northern Engineering
Great Northwest
Hanover Canada
Hawk Consultants
H.C. Price
Hunter 3D
Industrial Project Services
Inspirations
Jackovich Industrial
& Construction Supply
Judy Patrick Photography
Kakivik Asset Management
Kenai Aviation
Kenworth Alaska
Kuukpik Arctic Catering
Kuukpik/Veritas
Kuukpik - LCMF
Lounsbury & Associates
Lynden Air Cargo
Lynden Air Freight
Lynden Inc.
Lynden International
Lynden Logistics
Lynden Transport
Mapmakers of Alaska
Marathon Oil
Marketing Solutions
Mayflower Catering
MEDC International
MI Swaco
Michael Baker Jr.
Millennium Hotel
MWH
MRO Sales

N-P

Nabors Alaska Drilling
NANA/Colt Engineering
Natco Canada
Nature Conservancy, The
NEI Fluid Technology
Nordic Calista
North Slope Telecom
Northern Air Cargo
Northern Transportation Co.
Northwestern Arctic Air
Offshore Divers
Oilfield Improvements
Oilfield Transport
Pacific Rim Geological Consulting
Pacific Rim Institute
of Safety and Management (PRISM)
Panalpina
PDC/Harris Group
Peak Oilfield Service Co.
Penco
Perkins Coie
Petroleum Equipment & Services
Petrotechnical Resources of Alaska
PGS Onshore
ProComm Alaska
Prudhoe Bay Shop & Storage

Q-Z

QUADCO
Renew Air Taxi
Salt + Light Creative
Schlumberger
Security Aviation
Seekins Ford
Span-Alaska Consolidator
STEELFAB
Storm Chasers Marine Services
Taiga Ventures
Thrifty Car Rental
TOTE
Totem Equipment & Supply
Travco Industrial Housing
UBS Financial Services Inc.
Udelhoven Oilfield Systems Services
Umiat Commercial
Unique Machine
Unitech of Alaska
Univar USA
U.S. Bearings and Drives
Usibelli Coal Mine
VECO
Weaver Brothers
Worksafe
Well Safe
XTO Energy

Directory Categories

SERVICES, EQUIPMENT & SUPPLIES

Air Passenger/Charter & Support
Architecture
Arctic Engineering
Arctic Gear
Aviation Fuel Sales
Bearings
Buildings – Lease Space
Buildings – Modular
Camps, Catering & Lodging
Cash Management
Cellular Communications
Chemicals
Chemical Analytical Lab
Civil & Hazardous Waste
Coal – Export
Commercial Diving
Communications
Construction Equipment & Materials
Construction Project Management
Consulting
Contractors - General
Contractors - Pipeline
Control Systems
Corrosion Analysis
Drilling & Well Services
Drug Testing
Electrical
Employee Services
Energy Services
Engineering Services
Environmental Engineering & Consulting
Environmental Response & Cleanup
Environmental Supplies
Equipment & Heavy Hauling
Equipment Sales/Rental
Expeditor/Clerk Services
Fertilizer
Financial Services
Fire Protection
Freight/Shipping & Cargo
Fueling Services
General Oilfield Supplies
Geophysical & Geological Services
Health Care Professionals
Helicopter Contract/Charter Services
Industrial Gases
Industrial Parts & Supply
Inspection Services
Instrumentation Systems
Laboratory Services
Legal Services
Lodging
Logistics
Machining
Maintenance
Management Consulting
Maps
Marine Propulsion
Marine Services & Construction
Mat Systems
Mechanical & Electrical Inspection
Meetings & Conventions
Metal Distributors
Mining
Movers/Relocation
Mud & Mudlogging
Office Furniture
Oilfield Service & Rig Up
On-site Medical Services
Photography
Pipe & Fittings
Pipeline Maintenance
Plumbing
Process Equipment
Procurement Services
Production Equipment
Real Estate
Recycling Waste Management
Reporting Software
Restaurants
Right of Way Maintenance
Safety Equipment & Supplies
Security
Seismic & Geophysical
Shops/Storage Space
Soil Stabilization
Space Design/Planning
Steel Fabrication
Steel Sales
Surveying & Mapping
Tank Fabrication
Telephone Equipment & Sales
Temporary Placement Services
Training
Tubing & Tube Fittings
Underwater NDT & Photography
Underwater Welding
Vehicle Repair
Vehicle Sales/Rental
Welding
Weld Repairs/Manufacturing

OIL COMPANIES

Operators

Air Passenger/Charter & Support

Air Logistics of Alaska
1915 Donald Ave.
Fairbanks, AK 99701
Phone: (907) 452-1197
Fax: (907) 452-4539
Contact: Dave Scarbrough
Phone: Anchorage: (907) 248-3335
Email: dscarbrough@airlogak.com
Helicopter contract and charter services.

ERA Aviation
6160 Carl Brady Drive
Anchorage, AK 99502
Contact: Bryan Blixhavn
Phone: (907) 248-4422
Fax: (907) 266-8383
Email: info@eraaviation.com
Web site: www.eraaviation.com
Helicopter and fixed wing contract and charter services; scheduled airline service.

Evergreen Helicopters of Alaska
1936 Merrill Field Dr.
Anchorage, AK 99501
Contact: Joy Journeay, marketing mgr.
Phone: (907) 257-1519
Fax: (907) 279-6816
Email: joy@evergreenak.com
Contact: Greg Thies, director of marketing
Phone: (907) 257-1504
Email: g.thies@evergreenak.com
Nome office: (907) 443-5334
Airlines office: (907) 257-1500
Logistics: (907) 243-8677
Website: evergreenaviation.com
Evergreen's diverse fleet has provided award-winning safety to Alaskans since 1960 in petroleum exploration & production, firefighting, forestry, construction, search & rescue, cargo transport, and utility transmission.

F.S. Air
6121 S. Airpark Place
Anchorage, AK 99502
Contact: Sandra Butler
Phone: (907) 248-9595
Fax: (907) 243-1247
Email: subtler@fsair.com
Web site: www.fsair.com
Part 135 D.O.D. approved. Member of Medallion Foundation.

Kenai Aviation
P.O. Box 46
Kenai, AK 99611
Contact: Bob or Jim Bielefeld
Phone: (907) 283-4124
Phone: (800) 478-4124 (within Alaska)
Fax: (907) 283-5267
Email: kb@chugach.net
Air taxi services provided since 1961 state wide, mostly Cook Inlet. Single engine and twin Bonanza.

Lynden
Alaska Marine Lines
Alaska Railbelt Marine
Alaska West Express
Lynden Air Cargo
Lynden Air Freight
Lynden International
Lynden Logistics
Lynden Transport
6441 S. Airpark Pl.
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.

Northern Air Cargo
3900 W. International Airport Rd.
Anchorage, AK 99502
Contact: Nick Karnos, acct. mgr. Anch./Prudhoe Bay
Phone: (907) 249-5161
Fax: (907) 249-5194
Email: nkarnos@nac.aero
Web site: 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.

Northwestern Arctic Air
6231 S. Airpark Pl.
Anchorage, AK 99502
Contact: Judy McClellan, office mgr.
Phone: (907) 245-4566
Fax: (907) 245-4567
Email: pugslie@pobox.alaska.net
Web site: www.NWArcticAirAK.com
On-demand, worldwide, air charter service, Russia Far-East experience, medical transports, express package delivery, secure convenient, cost-effective, 24/7. Member Medallion Foundation.

Renew Air Taxi
P.O. Box 61230
Fairbanks, AK 99706
Contact: Bob Wener
Phone: (907) 457-7287
Fax: (907) 457-7288
Email: renew1@aol.com
Web site: www.RenewAir.com
Other Office:
Dillingham, AK 99576
Phone: (907) 842-3440
Turbine Otter air support for remote seismic exploration, mining and construction sites. Cargo, fuel and passengers on wheels, wheel skis and amphibian floats.

Security Aviation
3600 International Airport Rd.
Anchorage, AK 99502
Contact: S. Joe Kapper
Phone: (907) 248-2677 – 24 hour service
Fax: (907) 248-6911
Email: admin@securityaviation.biz
Website: www.securityaviation.biz
All twin engine aircraft including Citation-II business jet. Crew changes, hot freight-worldwide, VIP tours, emergency response. Approved by all oil companies, Alyeska & DOD.

Architecture

Kuukpik-LCMF
139 E. 51st Ave.
Anchorage, AK 99503
Contact: Richard Rearick, architectural mgr.
Contact: Willey Wilhelm, engineering mgr.
Contact: Tony Hoffman, survey mgr.
Phone: (907) 273-1830
Phone: (800) 955-1830
Fax: (907) 273-1831
Email: lcmfanch@alaska.net
Other Offices:
Barrow: (800) 478-8213
Email: ktoovak@lcmf.com
Alpine: (907) 670-4739
Email: alp1035@ppco.com
Arctic specialized architectural and engineering design for all structures; water/sewer, fuel and transportation systems design; contractor support surveying and permitting for oil and gas development; dredging operations, remote site land and hydrographic surveying.

Arctic Engineering

ASRC Energy Services
3900 C St., Ste. 701
Anchorage, AK 99503
Contact: Jack Laasch, exec. vp strategic dev. and external affairs
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: jack.laasch@asrcenergy.com
Web site: www.asrcenergy.com
Oil and gas services, engineering, construction, operations, maintenance, pipeline construction and maintenance, project management, geological and geophysical, drilling and completion engineering, well stimulation, exploration services.

ASRC Energy Services – Engineering and Technology
3900 C St.
Anchorage, AK 99503
Contact: John Lewis, vp operations
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: john.lewis@asrcenergy.com

Web site: www.asrcenergy.com
Drilling and completion engineering, well stimulation, facilities engineering, upstream exploration and production services, geological and geophysical services, automation, electrical and instrumentation, platform renovation and construction.

Golder Associates
1750 Abbott Rd., Ste. 200
Anchorage, AK 99507
Contact: Bob Dugan, mgr., Tom Krzewinski, Mark Musial, Bucky Tart
Phone: (907) 344-6001
Fax: (907) 344-6011
Website: www.golder.com
Providing geotechnical engineering, water resource, and geosciences services in support of resource development projects in Alaska and the Arctic. Other offices worldwide.

Great Northern Engineering
137 E. Arctic Ave.
Palmer, AK 99645
Contact: John H. Riggs, general mgr.
Phone: (907) 745-6988
Fax: (907) 745-0591
Email: gne@mtaonline.net
Website: www.greatnorthernengineering.com
Anchorage office: 561-0200
Kenai office: 283-5199
Great Northern Engineering (GNE) is a full-service engineering firm specializing in industrial power and petro-chemical engineering. Complete engineering services in mechanical, electrical, civil, structural, rotating equipment, and corrosion engineering. Consulting services in project design, preparation of project documents, bid assistance, project management, cost estimating and inspection services.

Arctic Gear

PGS Onshore
341 W. Tudor Rd., Ste. 206
Anchorage, AK 99503
Contact: Larry Watt, Alaska area mgr.
Phone: (907) 569-4049
Fax: (907) 569-4047
Email: larry.watt@pgsonshore.com
Houston Office
738 Hwy 6 South, Ste 900
Houston, TX 77079
Contact: Gehrig Schultz
Phone: (281) 589-6732
Fax: (281) 589-6685
Email: gehrig.schultz@pgsonshore.com
Geophysical acquisition and processing for the petroleum industry. PGS Onshore provides fully rubber tracked Arctic geophysical crews to acquire the highest density data with the softest environmental footprint on the North Slope.

Aviation Fuel Sales

Umiat Commercial
2700 S. Cushman St.
Fairbanks, AK 99701
Contact: Mike Tolbert
Phone: (907) 452-6631
Fax: (907) 451-8632
Email: mike@taigaventures.com
UCC provides lodging and fuel sales at Umiat located on the Colville River. We are open 24 hours a day everyday of the year.

Bearings

U.S. Bearings & Drives
611 E. International Airport Rd.
Anchorage, AK 99518
Contact: Dena Kelley, operations mgr.
Phone: 563-3000
Fax: 563-1003
Email: dkelley@bearings.com
Web site: www.bearings.com
U.S. Bearings & Drives, formerly BESCO has been providing bearings and drive components to our Alaskan customers since 1952. We offer quality components and experienced personnel.

Buildings — Lease Space

Prudhoe Bay Shop & Storage
Deadhorse Airport
Deadhorse, AK 99734
Contact: J. Harper Gaston, president
P.O. Box 670
Greenville, GA 30222

Notice to advertisers

Companies contracted to advertise in Petroleum News are invited to supply color or black and white photos for this directory. Contact Wadeen Hepworth for details:

Call (907) 770-3506, email whepworth@PetroleumNews.com or submit photos or slides by mail to Wadeen's attention at Petroleum News, P.O. Box 231651, Anchorage, AK 99523. All photos should be accompanied by a caption explaining when the picture was taken and describing what's in it.

Phone: (706) 672-0999
Fax: (706) 672-1188
Email: jcrlcr@numail.org
Space designed for oilfield services. Located one-half mile north of Deadhorse airport. 800 sf.–1,200 sf. individual or combined units. Rent includes heat, snow removal, maintenance and repairs.

Buildings — Modular

Alaska Cover-All LLC
6740 Jollipan Crt.
Anchorage, AK 99507
Contact: Paul Nelson, mgr.
Phone: (907) 346-1319
Fax: (907) 346-4400
Email: paul@alaskacoverall.com
Contact: Henry Brown
Phone: (907) 646-1219
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 Dreams
522 Goldstreak Rd.
Fairbanks, AK 99712
Contact: M. Huser, president
Phone: (907) 455-7712
Fax: (907) 455-7713
Email: AlaskaDreams@att.net
Specialized in design, sales and construction of fabric covered steel buildings, a cost efficient building solution for many applications. We offer our worldwide, longtime experience for your future project.

Travco Industrial Housing, Ltd.
1507 8 St.
Nisku, Alberta, Canada
Contact: Stewart Orange, sales rep.
Phone: (888) 387-2826
Fax: (780) 955-8938
Email: sorange@ptigroup.com
Web site: www.travco.ca
Travco is a world-class manufacturer of industrial and commercial modular structures. Our modular structures are used around the world as work camps, offices, wellsites, resorts, schools, etc.

Camps, Catering & Lodging

Alaska Tent & Tarp
529 Front St.
Fairbanks, AK 99701
Contact: Jim Haselberger
Phone: (907) 456-6328
Fax: (907) 452-5260
Email: aktent@ptialaska.net
Web site: www.ptialaska.net/~aktent

Chiulista Camp Services/Mayflower Catering
6613 Brayton Dr., Ste. C
Anchorage, AK 99507
Contact: George B. Gardner, pres/gm
Phone: (907) 278-2208
Fax: (907) 677-7261
Email: ggardner@calistacorp.com
The 100 percent Alaska Native owned and operated catering company on the North Slope, catering and housekeeping to your tastes, not ours.

Kuukpik Arctic Catering
5761 Silverado Way, Ste P
Anchorage, AK 99518
Contact: Rick MacMillan
Phone: (907) 562-5588
Fax: (907) 562-5898
Email: rickkac@aol.com

Travco Industrial Housing, Ltd.
1507 8 St.
Nisku, Alberta, Canada
Contact: Stewart Orange, sales rep.
Phone: (888) 387-2826
Fax: (780) 955-8938
Email: sorange@ptigroup.com
Web site: www.travco.ca
Travco is a world-class manufacturer of industrial and commercial modular structures. Our modular structures are used around the world as work camps, offices, wellsites, resorts, schools, etc.

Umiat Commercial
2700 S. Cushman St.
Fairbanks, AK 99701
Contact: Mike Tolbert
Phone: (907) 452-6631
Fax: (907) 451-8632
Email: mike@taigaventures.com
UCC provides lodging and fuel sales at Umiat located on the Colville River. We are open 24 hours a day everyday of the year.

Cash Management

UBS Financial Services, Inc.
3000 A St., Ste 100
Anchorage, AK 99503
Contact: Steven Lukshin, financial adviser
Phone: (907) 261-5914
Toll Free: (866) 261-5914
Fax: (907) 261-5990
Email: steven.lukshin@ubs.com
Web site: www.ubs.com/fa/stevenlukshin
UBS Financial Services is a leading U.S. financial service firm serving individuals, corporations and institutions offering investments, cash management and 401(k) services

Cellular Communications

ASTAC
4300 B St., Ste. 501
Anchorage, AK 99503
Contact: Erin Ealum
Phone: (907) 563-3989
Phone: 1-800-478-6409
Fax: (907) 563-1932
Email: info@astac.net
Full service cellular company providing cellular and wireless solutions, including equipment sales and service, wireless Internet, maintenance and installation to the North Slope region of Alaska.

Chemicals

Agrium
P.O. Box 575
Kenai, AK 99611
Contact: Lisa Parker, govt. relations
Phone: (907) 776-3275
Fax: (907) 776-5579
Email: lparker@agrium.com
Web site: www.agrium.com
Value added manufacturer of fertilizer products.

MI SWACO
721 W. First Ave.
Anchorage, AK 99501 &
225 W. 92nd Ave.
Anchorage, AK 99515
Contact: Craig Bieber
Phone: (907) 274-5564
Email: mialaska@alaska.net or dsr@alaska.net
MI SWACO DSR combines Alaska know-how and global strength to provide the oil industry with a full-service drilling partner

Univar USA
590 E. 100th Ave.
Anchorage, AK 990515
Contact: Ken Lambertsen
Phone: (907) 344-7444
Fax: (907) 522-1486
Email: Ken.Lambertsen@univarusa.com
Web site: www.univarusa.com
World's largest industrial chemical distributor serving Alaskans since 1924. Industrial emphasis in oil and gas refining, procuring and gas treating.

U.S. Bearings & Drives
611 E. International Airport Rd.
Anchorage, AK 99518
Contact: Dena Kelley, operations mgr.
Phone: 563-3000
Fax: 563-1003
Email: dkelley@bearings.com
Web site: www.bearings.com
U.S. Bearings & Drives, formerly BESCO has been providing bearings and drive components to our Alaskan customers since 1952. We offer quality compo-

nents and experienced personnel.

Chemical Analytical Lab

Univar USA
590 E. 100th Ave.
Anchorage, AK 990515
Contact: Ken Lambertsen
Phone: (907) 344-7444
Fax: (907) 522-1486
Email: Ken.Lambertsen@univarusa.com
Web site: www.univarusa.com
World's largest industrial chemical distributor serving Alaskans since 1924. Industrial emphasis in oil and gas refining, procuring and gas treating.

Civil & Hazardous Waste

MWH
1835 S. Bragaw St., Ste. 350
Anchorage, AK 99508
Contact: Brett Jokela
Phone: (907) 248-8883
Fax: (907) 248-8884
Email: Brett.Jokela@mwhglobal.com
The engineers, scientists, and constructors of MWH provide innovative projects and solutions for clients throughout Alaska and Worldwide.

Univar USA
590 E. 100th Ave.
Anchorage, AK 990515
Contact: Ken Lambertsen
Phone: (907) 344-7444
Fax: (907) 522-1486
Email: Ken.Lambertsen@univarusa.com
Web site: www.univarusa.com
World's largest industrial chemical distributor serving Alaskans since 1924. Industrial emphasis in oil and gas refining, procuring and gas treating.

Coal — Export

Usibelli Coal Mine
100 Cushman St., Ste. 210
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.

Commercial Diving

American Marine Corp.
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
American Marine Corp. provides full service marine construction and diving services throughout Alaska and the Pacific Basin.

Offshore Divers
5400 Eielson St.
Anchorage, AK 99518
Contact: Don Ingraham, owner/mgr.
Contact: Leif Simcox, owner/oper. mgr.
Phone: (907) 563-9060
Fax: (907) 563-9061
Email: don@offshoredivers.com
Web site: http//www.offshoredivers.com
Offshore Divers is an Alaska owned diving contractor specializing in sub-sea oilfield work on mooring systems, pipelines, platforms and docks in Cook Inlet, on the North Slope and in Valdez.

Storm Chasers Marine Services
P.O. Box 757
Seward, AK 99664
Contact: Mica Van Buskirk
Phone: (907) 224-3536
Fax: (907) 224-6080
Email: sci@seward.net
Providing quality marine services in Alaska for over 15 years. Commercial diving, underwater welding, underwater inspection with video, vessel repair, marine construction and marine salvage services.

Communications

ASRC Energy Services – Pipeline, Power & Communications
3900 C St.,
Anchorage, AK 99503
Contact: Wade Blasingame
Phone: (907) 339-6400
Fax: (907) 339-6444
Email:
wade.blasingame@asrcenergy.com
Web site: www.asrcenergy.com
Pipeline construction and maintenance, fiber optic cable installation.

ASTAC
4300 B St., Ste. 501
Anchorage, AK 99503
Contact: Erin Ealum
Phone: (907) 563-3989
Phone: 1-800-478-6409
Fax: (907) 563-1932
Email: info@astac.net
Providing local and long distance service, Internet, maintenance and training, consultation, installation, engineering, Centrex, custom calling features, digital cross connect service, and digital data service to the North Slope region of Alaska.

Michael Baker Jr.
4601 Business Park Blvd., Ste. 42
Anchorage, AK 99503
Contact: Bud Alto, business unit mgr.
Phone: (907) 273-1600
Fax: (907) 273-1699
Email: jalto@mbakercorp.com
Web site: www.mbakercorp.com
Juneau office: 175 Franklin St., Ste. 420
Juneau, AK 99801
Contact: McKie Campbell, Sr. environmental mgr.
Phone: (907) 463-3171
Fax: (907) 463-3107
Email: mckie@gci.net
Multi-discipline firm with project management, permitting, fiber optic, civil, structural, mechanical, electrical, and instrumentation services. Established offices in Anchorage and Juneau provide diversified staff accepting the challenges, delivering excellence.

ProComm Alaska
4831 Old Seward Hwy., #111
Anchorage, AK 99503
Contact: Natha Thompson, director of sales & marketing
Phone: (907) 373-7628 (Wasilla)
Fax: (907) 373-7636
Phone: (907) 563-1176 (Anchorage)
Toll Free: (800) 478-9191 (outside Alaska)
Email: nthompson@procommak.com
Website: www.ProCommAk.com
ProComm Alaska represents the complete line of Motorola products and is a Motorola service center. We offer the latest two-way radio technology for business and public safety. Locations in Anchorage, Fairbanks, Wasilla and Soldotna.

Construction Equipment & Materials

Alaska Dreams
522 Goldstreak Rd.
Fairbanks, AK 99712
Contact: M. Huser, president
Phone: (907) 455-7712
Fax: (907) 455-7713
Email: AlaskaDreams@att.net
As an independent Rockford steel building dealer we provide full service, industry leading hi-tech durable steel construction. The fully engineered and complete buildings guarantee fast and economical on site erection.

Brooks Range Supply
Pouch 340008
1 Old Spine Road
Prudhoe Bay, AK 99734
Contact: Mike Kunkel/Craig Welch, general managers
Phone: (907) 659-2550
Toll Free: (866) 659-2550
Fax: (907) 659-2650
Email: brooks@astacalaska.com
Your source on the Slope for safety supplies, welding supplies, automotive and truck parts, hardware, tools, steel, building materials, glass, propane, hydraulic hoses and fittings, paint and chemicals. Napa and True Value Hardware distribution.

Great Northwest
P.O. Box 74646
Fairbanks, AK 99704-4646
Contact: Buzz Otis
Phone: (907) 452-5617
Fax: (907) 456-7779
Email: info@grtnw.com
Web site: www.grtnw.com
Specializing in cold weather and heavy civil construction, gravel and rock products, site-work, petroleum industry construction, erosion control, underground utilities and reclamation services.

Jackovich Industrial & Construction Supply
Fairbanks: 1600 Wells St.
Attn: Buz Jackovich
Phone: (907) 456-4414
Fax: (907) 452-4846
Anchorage: 1716 Post Road
Attn: Steve Slone
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.

Construction Project Management

Alaska Anvil
509 W. 3rd Ave.
Anchorage, AK 99501–2237
Contact: Frank Weiss
Phone: (907) 276-2747
Fax: (907) 279-4088
Web site: anvilcorp.com
Other office: Kenai
50720 Kenai Spur Hwy, Mile 24.5
Kenai, AK 99611
Phone: (907) 776-5870
Fax: (907) 770-5871
Multi-discipline engineering and design services including construction management for petro-chemical and heavy industrial client projects.

Great Northern Engineering
137 E. Arctic Ave.
Palmer, AK 99645
Contact: John H. Riggs, general mgr.
Phone: (907) 745-6988
Fax: (907) 745-0591
Email: gne@mtaonline.net
Website: www.greatnorthernengineering.com
Anchorage office: 561-0200
Kenai office: 283-5199
Great Northern Engineering (GNE) is a full-service engineering firm specializing in industrial power and petro-chemical engineering. Complete engineering services in mechanical, electrical, civil, structural, rotating equipment, and corrosion engineering. Consulting services in project design, preparation of project documents, bid assistance, project management, cost estimating and inspection services.

Great Northwest
P.O. Box 74646
Fairbanks, AK 99704-4646
Contact: Buzz Otis
Phone: (907) 452-5617
Fax: (907) 456-7779
Email: info@grtnw.com
Web site: www.grtnw.com
Specializing in cold weather and heavy civil construction, gravel and rock products, site-work, petroleum industry construction, erosion control, underground utilities and reclamation services.

Hawk Consultants
200 W. 34th Ave., Ste. 809
Anchorage, AK 99503
Contact: Maynard Tapp, president
Phone: (907) 278-1877
Fax: (907) 278-1889
Email: info@hawkpros.com

Providing people and resources to the oil, gas, power, telecommunication and public works industries. Services include strategic planning, full service project management team consulting/outsourcing, supplemental professionals, professionals, management consulting services.

Lounsbury and Associates
723 W. 6th Ave.
Anchorage, AK 99501
Contact: Craig L. Savage, president
E-mail: csavage@lounsburyinc.com
Contact: Jim Sawhill, vp
Email: jsawhill@lounsburyinc.com
Phone: (907) 272-5451
Fax: (907) 272-9065
Toll Free: (800) 478-5451
Website: www.lounsburyinc.com
Provides civil engineering and project management services for oilfield development. Recent projects include: Tarn, Pam and Colville Delta North.

Michael Baker Jr.
4601 Business Park Blvd., Ste. 42
Anchorage, AK 99503
Contact: John M. Eldred, business unit mgr.
Phone: (907) 273-1115
Fax: (907) 273-1699
Email: jeldred@mbakercorp.com
Website: www.mbakercorp.com
Juneau office: 175 Franklin St., Ste. 420
Juneau, AK 99801
Contact: McKie Campbell, sr. environmental mgr.
Phone: (907) 463-3171
Fax: (907) 463-3107
Email: mckie@gci.net
Engineering skills include civil, structural, mechanical, electrical, project management, GIS, and hydrology. Energy services include CMMS (computerized maintenance management), managed operation and maintenance, training/competency services, and other related energy services.

NANA/Colt Engineering
700 G Street, 5th floor
Anchorage, AK 99501
Phone: (907) 273-3900
Fax: (907) 273-3990
Contact: John Minier
NANA/Colt offers project management, engineering, design, construction management, and procurement services to the oil industry.

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.

Consulting

CH2M HILL
301 W. Northern Lights Blvd., Ste. 601
Anchorage, AK 99516
Contact: Kelly Sobczek
Phone: (907) 646-0214
Fax: (907) 257-2016
Email: ksobczak@ch2m.com
Website: www.ch2m.com
Other Offices: World Wide
CH2M Hill is a global project delivery firm with services that span production, environmental permitting, treatment processes, technology and engineering, security, and operations and maintenance.

Kuukpik/Veritas
2000 E. 88th Ave.
Anchorage, AK 99507
Contact: Jeff Hastings
Phone: (907) 276-6037
Fax: (907) 279-5740
Email: Jeff_Hastings@VeritasDGC.com

Contractors — General

Alaska Interstate Construction
P.O. Box 233769
Anchorage, AK 99523
Contact: John Ellsworth
Phone: (907) 562-2792

COURTESY OF AEROMED

If there's a medical condition that the hospital in Bethel can't handle, Aeromed's Anchorage branch transfers the patient by jet aircraft to Anchorage or elsewhere. See the company profile on page B2.

Fax: (907) 562-4179
Email: info@aicllc.com
Website: www.aicllc.com
AIC provides cost-effective solutions to resource development industries. We provide innovative ideas to meet each requirement through the provision of best-in-class people and equipment coupled with exceptional performance.

American Marine Corp.
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
American Marine Corp. provides full service marine construction and diving services throughout Alaska and the Pacific Basin.

ASRC Energy Services
3900 C St., Ste. 701
Anchorage, AK 99503
Contact: Jack Laasch, exec. vp strategic dev. and external affairs
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: jack.laasch@asrcenergry.com
Web site: www.asrcenergy.com
Oil and gas services, engineering, construction, operations, maintenance, pipeline construction and maintenance, project management, geological and geophysical, drilling and completion engineering, well stimulation, exploration services.

ASRC Energy Services – Operations and Maintenance
3900 C St.
Anchorage, AK 99503
Contact: Mark Nelson, exec. vp
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: mark.nelson@asrcenergy.com
Web site: www.asrcenergy.com
Oil and gas services, industrial construction, operations and maintenance, module fabrication and assembly, project management and non-destructive testing.

CONAM Construction
301 W. Northern Lights Blvd., Ste 300
Anchorage, AK 99503
Contact: Bob Stinson
Phone: (907) 278-6600
Fax: (907) 278-3255
Email: bstinson@conamco.com
Oil, gas, and mining facility; pipeline, civil, and commercial construction.

Cruz Construction
HC04 Box 9323
Palmer, AK 99645
Contact: Dave or Dana Cruz
Phone: (907) 746-3144
Fax: (907) 746-5557
Email: cruzco@alaska.net
General contractor specializing in heavy civil construction, horizontal direction drilling for utilities. Ice road and ice bridge construction throughout Alaska in support of resource development.

Great Northwest
P.O. Box 74646
Fairbanks, AK 99704-4646
Contact: Buzz Otis
Phone: (907) 452-5617
Fax: (907) 456-7779
Email: info@grtnw.com
Web site: www.grtnw.com
Specializing in cold weather and heavy civil construction, gravel and rock products, site-work, petroleum industry construction, erosion control, underground utilities and reclamation services.

H.C. Price
301 W. Northern Lights Blvd., #300
Anchorage, AK 99503
Contact: David L. Matthews
Phone: (907) 278-4400
Fax: (907) 278-3255
Other offices: Dallas, Texas, and international.
Email: dmatthews@hcpriceco.com
EPC contractor performing oilfield support construction projects and other heavy industrial projects statewide.

MWH
1835 S. Bragaw St., Ste. 350
Anchorage, AK 99508
Contact: Brett Jokela
Phone: (907) 248-8883
Fax: (907) 248-8884
Email: Brett.Jokela@mwhglobal.com
The engineers, scientists, and constructors of MWH provide innovative projects and solutions for clients throughout Alaska and Worldwide.

Peak Oilfield Service
2525 C St., Ste. 201
Anchorage, AK 99503
Contact: Bill Stamps, business development/ex. affairs
Phone: (907) 263-7000
Fax: (907) 263-7070
Email: billstamps@peakalaska.com
Web site: www.peakalaska.com
Alaska based general contractors.

Udelhoven Oilfield System Services
Anchorage office:
184 E. 53rd Ave.
Anchorage, AK 99518
Phone: (907) 344-1577
Fax: (907) 522-2541
Nikiski office:
P.O. Box 8349
Nikiski, AK 99635
Phone: (907) 776-5185
Fax: (907) 776-8105
Prudhoe office:
Pouch 340103
Prudhoe Bay, AK 99734
Phone: (907) 659-8093
Fax: (907) 659-8489
Serving Alaska for more than 25 years.

Contractors — Pipeline

ASRC Energy Services – Pipeline, Power & Communications
3900 C St.,
Anchorage, AK 99503
Contact: Wade Blasingame
Phone: (907) 339-6400
Fax: (907) 339-6444
Email:
wade.blasingame@asrcenergy.com
Web site: www.asrcenergy.com
Pipeline construction and maintenance, fiber optic cable installation.

CONAM Construction
301 W. Northern Lights Blvd., Ste 300
Anchorage, AK 99503
Contact: Bob Stinson
Phone: (907) 278-6600
Fax: (907) 278-3255
Email: bstinson@conamco.com
Oil, gas, and mining facility; pipeline, civil, and commercial construction.

H.C. Price
301 W. Northern Lights Blvd., #300
Anchorage, AK 99503
Contact: David L. Matthews
Phone: (907) 278-4400
Fax: (907) 278-3255
Other offices: Dallas, Texas, and international.
Email: dmatthews@hcpriceco.com
EPC contractor performing oilfield support construction projects and other heavy industrial projects statewide.

Peak Oilfield Service
2525 C St., Ste. 201
Anchorage, AK 99503
Contact: Bill Stamps, business development/ex. affairs
Phone: (907) 263-7000
Fax: (907) 263-7070
Email: billstamps@peakalaska.com
Web site: www.peakalaska.com
Alaska based general contractors.

Control Systems

Arctic Controls
1120 E. 5th Ave.
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, Inc. has been highly successful as manufacturer representatives for the state of Alaska in the Process Control and Instrumentation field. Selling equipment to the oil and gas markets, mining and water wastewater/municipal markets.

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

Corrosion Analysis

Kakivik Asset Management
5401 Fairbanks St., Ste. 3
Anchorage, AK 99518
Phone: (907) 770-9400
Fax: (907) 770-9450
Contact: Mark Hylen, president/CEO
Email: mhylen@kakivik.com
Web site: www.kakivik.com
Fairbanks Office
Phone: (907) 451-4898
Fax: (907) 451-4897
Valdez Office
Phone: (907) 831-1390
Offering all elements of nondestructive testing, inspection services, quality control and asset management

Drilling & Well Services

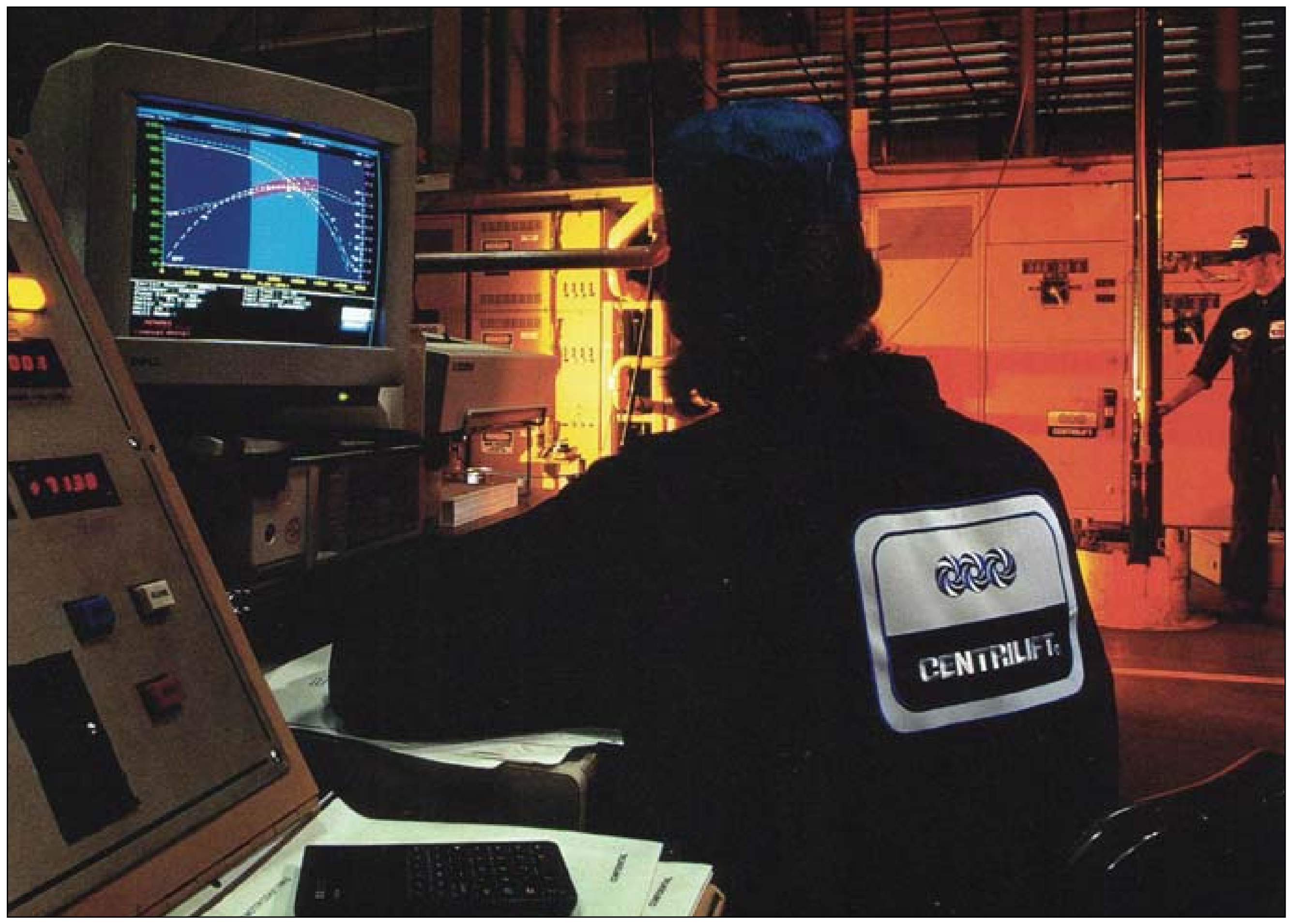
ASRC Energy Services – Engineering and Technology
3900 C St.
Anchorage, AK 99503
Contact: John Lewis, vp operations
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: john.lewis@asrcenergy.com
Web site: www.asrcenergy.com
Drilling and completion engineering, well stimulation, facilities engineering, upstream exploration and production services, geological and geophysical services, automation, electrical and instrumentation, platform renovation and construction.

Baker Hughes Inteq
7260 Homer Dr.
Anchorage, AK 99518
Contact: Dave Reimer, AK mgr.
Phone: (907) 267-6600
Cell Phone: (907) 250-6420
Fax: (907) 267-6623
Email: dave.reimer@inteq.com
Web site: www.bakerhughes.com
Baker Hughes Inteq delivers advanced drilling technologies and services that deliver efficiency and precise well placement. Major capabilities include directional drilling, measurement-while-drilling (MWD), logging-while-drilling (LWD), drilling fluids, and well-site information management services.

Doyon Drilling
101 W. Benson Blvd., Ste. 503
Anchorage, AK 99503
Contact: Ron Wilson
Phone: (907) 563-5530
Fax: (907) 561-8986
Email: rwilson@doyondrilling.com

The Fairweather Companies
2000 E. 88th Ave.
Anchorage, AK 99507
Contact: Bill Penrose
Phone: (907) 258-3446
Fax: (907) 279-5740
Website: www.fairweather.com
The Fairweather Companies provide project management, engineering, drilling, permitting, logistics, and operational services to the exploration and production sectors of the petroleum industry.

FMC Energy Systems
700 W. International Airport Rd.
Anchorage, AK 99518-1122
Contact: Alan McArthur, area mgr.
Phone: (907) 563-3990
Fax: (907) 563-5810
Email: alan.mcarthur@fmcti.com



COURTESY OF BAKER HUGHES INTEQ

Centrilift, part of the Baker Hughes system, has a full line of electric submersible pumps, controls and cable for a variety of applications. See the company profile on page B11.

Supplier of wellheads and Christmas trees, to API specifications, with repair facility and service organization to support all North Slope and Cook Inlet locations.

MI SWACO
721 W. First Ave.
Anchorage, AK 99501
Contact: Brad Billon
Phone: (907) 274-5526
Fax: (907) 279-6729
Email: bbillon@miswaco.com
SWACO
Anchorage, AK 99501
Contact: Dana Rhodes
Phone: (907) 274-5541
Email: danarhodes@midF.com
MI SWACO combines Alaska know-how and global strength to provide the oil industry with a full-service drilling partner

Nabors Alaska Drilling
2525 C St., Ste. 200
Anchorage, AK 99503
Contact: Leslie Adams
Phone: (907) 263-6000
Fax: (907) 563-3734
Email: leslie.adams@nabors.com

NIED
341 W. Tudor Rd., Ste. 206
Anchorage, AK 99503
Contact: Conrad Perry
Phone: (907) 561-0650
Fax: (907) 561-0763
Email: cperry@niedi.com
Web site: www.NIEDI.com

Nordic-Calista Services
4700 Business Park Blvd., Bldg. E, #19
Anchorage, AK 99503
Phone: (907) 561-7458
Fax: (907) 563-8347
Contact: Phil Snisarenko, Operations Mgr.
Email: Nordic@gci.net
Nordic-Calista Services provides innovative, reliable workover/drilling rigs specifically designer for arctic conditions. We strive to maximize productivity and efficiency while promoting safety and environmentally-conscious drill practices.

Petroleum Equipment & Services
5631 Silverado Way, Ste G
Anchorage, AK 99518
Contact: Kevin Durling/Donald Parker
Phone: (907) 248-0066
Fax: (907) 248-4429
Email: sales@pesiak.com
Web site: www.pesiak.com
P.E.S.I. provides both conventional and specialty products and services for the Alaska oil industry. Regardless of your location, you will receive products and service that is guaranteed to meet your requirements.

Quadco
6116 Nielson Way
Anchorage, AK 99518
Contact: David Baggett, vp, AK mgr.
Phone: (907) 563-8999
Fax: (907) 563-8985
Email: dbaggett@quadcoinc.com
Other offices: Farmington NM, Denver CO, Casper WY
Quadco has supplied services to the Alaska oilfield since 1976. We have trained personnel to help with instrumentation, solids control, pipe handling and Top Drive drilling equipment. 24 hour on call

Schlumberger Oilfield Services
2525 Gambell St.
Anchorage, AK 99503
Contact: Daniel Palmer
Phone: (907) 273-1700
Fax: (907) 561-8317
Email: Palmer2@slb.com
Web site: www.slb.com
Schlumberger Oilfield Services provides people and technology, working together to offer exploration and production solutions for the life of oil and gas reservoirs.

Unique Machine
5839 Old Seward Hwy
Anchorage, AK 99518
Contact: Pat Hanley, COO
Phone: (907) 563-3012
Fax: (907) 562-1376
Email: office@uniquemachineinc.com
Web site: www.uniquemachineinc.com
The design, development, manufacture and distribution of oilfield construction, mining, fishing and government parts to industry quality standards.

Drug Testing

ArrowHealth Corp.
4050 Lake Otis Pkwy., Ste. 207
Anchorage, AK 99508
Contact: Lea Counts, dir. Substance Abuse Testing Div.
Phone: (907) 868-8885
Fax: (907) 868-8882
Email: arrowh@myexcel.com
Web site: www.arrowhealthcorp.com
ArrowHealth is Alaska's premier service provider of occupational health and substance abuse testing. We service the local community, national contracts, and government agencies alike with customized solutions.

Worksafe
300 W. 36th Ave., Ste. A
Anchorage, AK 99503
Phone: (907) 563-8378
Fax: (907) 563-8380
Web site: www.worksafeinc.com
Worksafe works to keep your employees from getting hurt on the job if they are using drugs or alcohol. Worksafe Drug Testing increases productivity, reduces liability with fewer injuries and accidents and provides insurance cost savings.

Electrical

Dowland-Bach
6130 Tuttle Pl.
Anchorage, AK 99507
Contact: Lynn Johnson
Phone: (907) 562-5818
Fax: (907) 563-4721
Web site: www.dowlandbach.com
Industrial control and panel fabrication

Udelhoven Oilfield System Services
Anchorage office:
184 E. 53rd Ave.
Anchorage, AK 99518
Phone: (907) 344-1577
Fax: (907) 522-2541
Nikiski office:
P.O. Box 8349
Nikiski, AK 99635
Phone: (907) 776-5185
Fax: (907) 776-8105
Prudhoe office:
Pouch 340103
Prudhoe Bay, AK 99734
Phone: (907) 659-8093
Fax: (907) 659-8489
Serving Alaska for more than 25 years.

Employee Services

Alaska's People
2600 Cordova St., Ste. 211
Anchorage, AK 99503
Contact: Teresa Nelson, director
Phone: (907) 263-7013
Fax: (907) 263-7083
Email: tnelson@citci.com
Web site: www.alaskapeople.com
Employment reference services with an emphasis on qualified Alaska Natives and American Indians.

ArrowHealth Corp.
4050 Lake Otis Pkwy., Ste. 207
Anchorage, AK 99508
Contact: Lea Counts, dir. Substance Abuse Testing Div.
Phone: (907) 868-8885
Fax: (907) 868-8882
Email: arrowh@myexcel.com
Web site: www.arrowhealthcorp.com
ArrowHealth is Alaska's premier service provider of occupational health and substance abuse testing. We service the local community, national contracts, and government agencies alike with customized solutions.

Hawk Consultants
200 W. 34th Ave., Ste. 809
Anchorage, AK 99503
Contact: Maynard Tapp, president
Phone: (907) 278-1877
Fax: (907) 278-1889
Email: info@hawkpros.com
Providing people and resources to the oil, gas, power, telecommunication and public works industries. Services include strategic planning, full service project management team consulting/outsourcing, supplemental professionals, professionals, management consulting services.

Worksafe
300 W. 36th Ave., Ste. A
Anchorage, AK 99503
Phone: (907) 563-8378
Fax: (907) 563-8380
Web site: www.worksafeinc.com
Worksafe works to keep your employees from getting hurt on the job if they are using drugs or alcohol. Worksafe Drug Testing increases productivity, reduces liability with fewer injuries and accidents and provides insurance cost savings.

Energy Services

ASRC Energy Services
3900 C St., Ste. 701
Anchorage, AK 99503
Contact: Jack Laasch, exec. vp strategic dev. and external affairs
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: jack.laasch@asrcenergy.com
Web site: www.asrcenergy.com
Oil and gas services, engineering, construction, operations, maintenance, pipeline construction and maintenance, project management, geological and geophysical, drilling and completion engineering, well stimulation, exploration services.

ASRC Energy Services – Operations and Maintenance
3900 C St.
Anchorage, AK 99503
Contact: Mark Nelson, exec. vp
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: mark.nelson@asrcenergy.com
Web site: www.asrcenergy.com
Oil and gas services, industrial construction, operations and maintenance, module fabrication and assembly, project management and non-destructive testing.

Hunter 3-D
9898 Bissonnet St., Ste. 362
Houston, TX 77036
Contact: Dan Huston, vice president
Phone: (713) 981-4650
Fax: (713) 981-4650
Email: hunter3d@wt.net
Web site: www.hunter3dinc.com
Hunter 3-D is a geophysical consulting company based in Houston, Texas. We interpret seismic, gravity and magnetic data for projects in Alaska and worldwide.

Michael Baker Jr.
4601 Business Park Blvd., Ste. 42
Anchorage, AK 99503
Contact: John M. Eldred, business unit mgr.
Phone: (907) 273-1115
Fax: (907) 273-1699
Email: jeldred@mbakercorp.com
Website: www.mbakercorp.com
Juneau office: 175 Franklin St., Ste. 420
Juneau, AK 99801
Contact: McKie Campbell, sr. environmental mgr.
Phone: (907) 463-3171
Fax: (907) 463-3107
Email: mckie@gci.net
Engineering skills include civil, structural, mechanical, electrical, project management, GIS, and hydrology. Energy services include CMMS (computerized maintenance management), managed operation and maintenance, training/competency services, and other related energy services.

Engineering Services

AES Lynx Enterprises
1029 W. 3rd Ave., Ste.400
Anchorage, AK 99501
Contact: Mark Schindler, president & CEO
Contact: Diane Fleisher, office mgr.
Phone: (907) 277-4611
Fax: (907) 277-4717
Email: mschindler@lynxalaska.com
Lynx professionals offer the following services: major project strategic planning and project management; onshore and offshore projects, exploration and development phases, permits and right-of-way acquisition, National Environmental Policy Act (NEPA) documentation, Environmental Assessment (EA) and Environmental Impact Statement (EIS) preparation.

Alaska Anvil
509 W. 3rd Ave.
Anchorage, AK 99501–2237
Contact: Frank Weiss
Phone: (907) 276-2747
Fax: (907) 279-4088
Web site: anvilcorp.com
Other office: Kenai
50720 Kenai Spur Hwy, Mile 24.5
Kenai, AK 99611
Phone: (907) 776-5870
Fax: (907) 770-5871
Multi-discipline engineering and design services including construction management for petro-chemical and heavy industrial client projects.

Alpine-Meadow
11043 Tsusena Circle
Eagle River, AK 99577
Contact: George Snodgrass, president
Phone: (907) 694-7423
Fax: (907) 694-7423
Email: grsnodgrass@alpine-meadow.com
Website: www.alpine-meadow.com
We are a small, low-cost, professional, personal company with 18 years engineering and environmental experience in Alaska with major oil companies. We offer permitting and compliance, strategic planning, incident investigations, crisis management services.

CH2M HILL
301 W. Northern Lights Blvd., Ste. 601
Anchorage, AK 99516
Contact: Kelly Sobczek
Phone: (907) 646-0214
Fax: (907) 257-2016
Email: ksobczak@ch2m.com
Website: www.ch2m.com
Other Offices: World Wide
CH2M Hill is a global project delivery firm with services that span production, environmental permitting, treatment processes, technology and engineering, security, and operations and maintenance.

Engineered Fire & Safety
3138 Commercial Dr.
Anchorage, AK 99501
Contact: Don Maupin, gen. mgr.
Phone: (907) 274-7973 ext. 123
Fax: (907) 274-6265
Email d.maupin@efs-fire.com
Web site: www.efs-fire.com
An industry leader in the design, integration and testing of safety solutions for high value risks. UL system certifications and panel fabrication.

ENSR International
1835 S. Bragaw St., Ste. 490
Anchorage, AK 99512
Contact: Chris L. Humphrey, P.E.
Phone: (907) 561-5700
Fax: (907) 273-4555
Email: chumphrey@ensr.com
Serving Alaska since 1977. ENSR is an environmental engineering and consulting firm with more than 70 offices worldwide providing environmental planning, assessment, permitting, compliance management and contamination cleanup.

The Fairweather Companies
2000 E. 88th Ave.
Anchorage, AK 99507
Contact: Bill Penrose
Phone: (907) 258-3446
Fax: (907) 279-5740
Website: www.fairweather.com
The Fairweather Companies provide project management, engineering, drilling, permitting, logistics, and operational services to the exploration and production sectors of the petroleum industry.

Great Northern Engineering
137 E. Arctic Ave.
Palmer, AK 99645
Contact: John H. Riggs, general mgr.
Phone: (907) 745-6988
Fax: (907) 745-0591
Email: gne@mtaonline.net
Website: www.greatnorthernengineering.com
Anchorage office: 561-0200
Kenai office: 283-5199
Great Northern Engineering (GNE) is a full-service engineering firm specializing in industrial power and petro-chemical engineering. Complete engineering services in mechanical, electrical, civil, structural, rotating equipment, and corrosion engineering. Consulting services in project design, preparation of project documents, bid assistance, project management, cost estimating and inspection services.

Kakivik Asset Management
5401 Fairbanks St., Ste. 3
Anchorage, AK 99518
Phone: (907) 770-9400
Fax: (907) 770-9450
Contact: Mark Hylen, president/CEO
Email: mhylen@kakivik.com
Web site: www.kakivik.com
Fairbanks Office
Phone: (907) 451-4898
Fax: (907) 451-4897
Valdez Office
Phone: (907) 831-1390
Offering all elements of nondestructive testing, inspection services, quality control and asset management.

Kuukpik-LCMF
139 E. 51st Ave.
Anchorage, AK 99503
Contact: Richard Rearick, architectural mgr.
Contact: Willey Wilhelm, engineering mgr.
Contact: Tony Hoffman, survey mgr.
Phone: (907) 273-1830
Phone: (800) 955-1830
Fax: (907) 273-1831
Email: lcmfanch@alaska.net
Other Offices:
Barrow: (800) 478-8213
Email: ktoovak@lcmf.com
Alpine: (907) 670-4739
Email: alp1035@ppco.com
Arctic specialized architectural and engineering design for all structures; water/sewer, fuel and transportation systems design; contractor support surveying and permitting for oil and gas development; dredging operations, remote site land and hydrographic surveying.

NANA/Colt Engineering
700 G Street, 5th floor
Anchorage, AK 99501
Phone: (907) 273-3900
Fax: (907) 273-3990
Contact: John Minier
NANA/Colt offers project management, engineering, design, construction management, and procurement services to the oil industry.

Natco Canada
P.O. Box 850, Stn. T
Calgary, Alberta T2H2H3
Contact: Kevin Baird, bus. dev. mgr.
Phone: (403) 203-2103
Fax: (403) 236-0488
Email: kbaird@natco-ca.com
Web site: www.natco-ca.com
Natco Group engineers, designs and manufactures process, wellhead and water treatment equipment and systems used in the production of oil and gas worldwide.

PDC Harris Group
1231 Gambell St.
Anchorage, AK 99501
Contact: Steve Theno
Phone: (907) 644-4716
Fax: (907) 561-7028
Email: stevetheno@pdceng.com
Contact: Mike Moora
Phone: same as above

Fax: same as above
Email: mike.moora@harrisgroup.com
Web site: www.harrisgroup.com
PDC-Harris Group provides front-end engineering design, detailed design, and environmental permitting services to the oil, gas, and power generation markets.

Petrotechnical Resources of Alaska (PRA)
3601 C St., Ste. 1378
Anchorage, AK 99503
Contact: Tom Walsh
Phone: (907) 272-1232
Fax: (907) 272-1344
Email: info@petroak.com
Our multidisciplinary staff of qualified and experienced professionals possess a diverse array of technical capabilities to provide our clients with a full spectrum of geoscience and engineering consulting services.

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.

Environmental Engineering & Consulting

AES Lynx Enterprises
1029 W. 3rd Ave., Ste.400
Anchorage, AK 99501
Contact: Mark Schindler, President & CEO
Contact: Diane Fleisher, office mgr.
Phone: (907) 277-4611
Fax: (907) 277-4717
Email: mschindler@lynxalaska.com
Lynx professionals offer the following services: major project strategic planning and project management; onshore and offshore projects, exploration and development phases, permits and right-of-way acquisition, National Environmental Policy Act (NEPA) documentation, Environmental Assessment (EA) and Environmental Impact Statement (EIS) preparation.

Alaska Anvil
509 W. 3rd Ave.
Anchorage, AK 99501–2237
Contact: Frank Weiss
Phone: (907) 276-2747
Fax: (907) 279-4088
Web site: anvilcorp.com
Other office: Kenai
50720 Kenai Spur Hwy, Mile 24.5
Kenai, AK 99611
Phone: (907) 776-5870
Fax: (907) 770-5871
Multi-discipline engineering and design services including construction management for petro-chemical and heavy industrial client projects.

Alpine-Meadow
11043 Tsusena Circle
Eagle River, AK 99577
Contact: George Snodgrass, president
Phone: (907) 694-7423
Fax: (907) 694-7423
Email: grsnodgrass@alpine-meadow.com
Website: www.alpine-meadow.com
We are a small, low-cost, professional, personal company with 18 years engineering and environmental experience in Alaska with major oil companies. We offer permitting and compliance, strategic planning, incident investigations, crisis management services.

CH2M HILL
301 W. Northern Lights Blvd., Ste. 601
Anchorage, AK 99516
Contact: Kelly Sobczek
Phone: (907) 646-0214
Fax: (907) 257-2016
Email: ksobczak@ch2m.com
Website: www.ch2m.com
Other Offices: World Wide
CH2M Hill is a global project delivery firm with services that span production, environmental permitting, treatment processes, technology and engineering, security, and operations and maintenance.

ENSR International
1835 S. Bragaw St., Ste. 490
Anchorage, AK 99512
Contact: Chris L. Humphrey, P.E.
Phone: (907) 561-5700
Fax: (907) 273-4555
Email: chumphrey@ensr.com
Serving Alaska since 1977. ENSR is an environmental engineering and consulting firm with more than 70 offices worldwide providing environmental planning, assessment, permitting, compliance management and contamination cleanup.

Golder Associates
1750 Abbott Rd., Ste. 200
Anchorage, AK 99507
Contact: Bob Dugan, mgr., Tom Krzewinski, Mark Musial, Bucky Tart
Phone: (907) 344-6001
Fax: (907) 344-6011
Website: www.golder.com
Providing geotechnical engineering, water resource, and geosciences services in support of resource development projects in Alaska and the Arctic. Other offices worldwide.

MWH
1835 S. Bragaw St., Ste. 350
Anchorage, AK 99508
Contact: Brett Jokela
Phone: (907) 248-8883
Fax: (907) 248-8884
Email: Brett.Jokela@mwhglobal.com
The engineers, scientists, and constructors of MWH provide innovative projects and solutions for clients throughout Alaska and Worldwide.

Pacific Environmental (PENCO)
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. American Maine svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
PENCO provides environmental response, containment and clean up. Hazardous wastes and contaminated site clean up and remediation. Asbestos and lead abatement. Petroleum vessel services and bulk fuel oil facility and storage tank maintenance, management and operations.

PDC Harris Group
1231 Gambell St.
Anchorage, AK 99501
Contact: Steve Theno
Phone: (907) 644-4716
Fax: (907) 561-7028
Email: stevetheno@pdceng.com
Contact: Mike Moora
Phone: same as above
Fax: same as above
Email: mike.moora@harrisgroup.com
Web site: www.harrisgroup.com
PDC-Harris Group provides front-end engineering design, detailed design, and environmental permitting services to the oil, gas, and power generation markets.

Quadco
6116 Nielson Way
Anchorage, AK 99518
Contact: David Baggett, vp, AK mgr.
Phone: (907) 563-8999
Fax: (907) 563-8985
Email: dbaggett@quadcoinc.com
Other offices: Farmington NM, Denver CO, Casper WY
Quadco has supplied services to the Alaska oilfield since 1976. We have trained personnel to help with instrumentation, solids control, pipe handling and Top Drive drilling equipment. 24 hour on call

Environmental Response & Cleanup

Alaska Interstate Construction
P.O. Box 233769
Anchorage, AK 99523
Contact: John Ellsworth
Phone: (907) 562-2792
Fax: (907) 562-4179
Email: info@aicllc.com
Website: www.aicllc.com
AIC provides cost-effective solutions to resource development industries. We provide innovative ideas to meet each requirement through the provision of best-in-class people and equipment coupled with exceptional performance.

ENSR International
1835 S. Bragaw St., Ste. 490
Anchorage, AK 99512
Contact: Chris L. Humphrey, P.E.
Phone: (907) 561-5700
Fax: (907) 273-4555
Email: chumphrey@ensr.com
Serving Alaska since 1977. ENSR is an environmental engineering and consulting firm with more than 70 offices worldwide providing environmental planning, assessment, permitting, compliance management and contamination cleanup.

Great Northwest
P.O. Box 74646
Fairbanks, AK 99704-4646
Contact: Buzz Otis
Phone: (907) 452-5617
Fax: (907) 456-7779
Email: info@grtnw.com
Web site: www.grtnw.com
Specializing in cold weather and heavy civil construction, gravel and rock products, site-work, petroleum industry construction, erosion control, underground utilities and reclamation services.

Pacific Environmental (PENCO)
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. American Maine svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
PENCO provides environmental response, containment and clean up. Hazardous wastes and contaminated site clean up and remediation. Asbestos and lead abatement. Petroleum vessel services and bulk fuel oil facility and storage tank maintenance, management and operations.

Unitech of Alaska
2130 E. Dimond Blvd.
Anchorage, AK 99507
Contact: Debbie Hawley
Phone: (907) 349-5142
Phone: (800) 649-5859
Fax: (907) 349-2733
Email: unitech@alaska.com
Email: dhawley@unitechofalaska.com
UOA is Alaska's only 24-hour oil spill remediation, environmental and industrial supply company. Specialty areas include sorbents, geotextile, containment berms, drums and ice melt.

Environmental Supplies

Arctic Fire & Safety
702 30th Ave.
Fairbanks, AK 99701
Contact: Bobby, Shane, Gigi
Phone: (907) 378-2116
Fax: (907) 452-7876
Email: arcfire@yahoo.com
Your Alaskan owned safety specialist since 1975. Gas detection, sales/rentals, containments, U.N. shipping boxes, barrels, P.P.E. material handling, totes, spill kits, all absorbents. We stock.

Pacific Environmental (PENCO)
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. American Maine svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
PENCO provides environmental response, containment and clean up. Hazardous wastes and contaminated site clean up and remediation. Asbestos and lead abatement. Petroleum vessel services and bulk fuel oil facility and storage tank maintenance, management and operations.

Unitech of Alaska
2130 E. Dimond Blvd.
Anchorage, AK 99507
Contact: Debbie Hawley
Phone: (907) 349-5142
Phone: (800) 649-5859
Fax: (907) 349-2733
Email: unitech@alaska.com
Email: dhawley@unitechofalaska.com
UOA is Alaska's only 24-hour oil spill remediation, environmental and industrial supply company. Specialty areas include sorbents, geotextile, containment berms, drums and ice melt.

Equipment & Heavy Hauling

Alaska Interstate Construction
P.O. Box 233769
Anchorage, AK 99523
Contact: John Ellsworth
Phone: (907) 562-2792
Fax: (907) 562-4179
Email: info@aicllc.com
Website: www.aicllc.com
AIC provides cost-effective solutions to resource development industries. We provide innovative ideas to meet each requirement through the provision of best-in-class people and equipment coupled with exceptional performance.

Carlile Transportation Systems
1800 E. 1st Ave.
Anchorage, AK 99501
Contact: Linda Leary
Ph: (907) 267-7797
Fax: (907) 276-6786
Email: lleary@carlilekw.com
Other Offices: Fairbanks, Prudhoe Bay, Kenai, Seward, Federal Way, WA, Houston, TX, Edomonton, ALTA
Alaska owned and operated, full service, multi-modal, transportation and logistics company.

Crowley Alaska
2525 C St., Ste. 303
Anchorage, AK 99503
Contact: Craig Tornga
Phone: (907) 278-4978
Fax: (907) 257-2828
Email: cms.@crowley.com
Marine transportation throughout Alaska. North Slope heavy hauling with CATCO all-terrain vehicles.

Northern Transportation
310 K St., Ste. 200
Anchorage, AK 99501
Contact: John Marshall, Lynette Storoz
Phone: (907) 264-6682
Fax: (907) 264-6602
Email: email@ntcl.com
Marine transportation along Alaska's North Slope via Mackenzie River route.

TOTE-Totem Ocean Trailer Express
2511 Tidewater Road
Anchorage, AK 99501
Contact: Curt Stoner
Phone: (907) 265-7215
Phone: (800) 234-8683
Fax: (907) 278-9689
Email: cstoner@totemocean.com
Web site: www.totemocean.com
TOTE's roll on/roll off ships sail two times per week between the Port of Tacoma and the Port of Anchorage. Transit time is a fast 66 hours.

Weaver Brothers
14223 Kenai Spur Hwy.
Kenai, AK 99611
Contact: Glen Dye, terminal mgr.
Phone: (907) 283-7975
Fax: (907) 283-3677
Email: glend@wbialaska.com
Other Offices:
Anchorage, Alaska
Fairbanks, Alaska
Trucking company specializing in oil field winch truck services. Bed tandems & loaders plus rig moving capabilities. Petroleum and chemical trailers, lowboys, bulk trailers, vans and flats.

Equipment Sales/Rental

Colville
Pouch 340012
Prudhoe Bay, AK 99734
Contact: Rick Hofreiter or John Daly
Phone: (907) 659-3197
Fax: (907) 659-3190
Diesel, gasoline, jet fuel, aviation gasoline in bulk and small quantity deliveries, electronic card-lock fleet management, solid waste and recycling, steel, industrial gases and solid waste.

CONAM Construction
301 W. Northern Lights Blvd., Ste 300
Anchorage, AK 99503
Contact: Bob Stinson

Baker Hughes INTEQ

The Right Stuff: systems integrator matches resources to customers

By SUSAN BRAUND

Petroleum Directory Contributing Writer

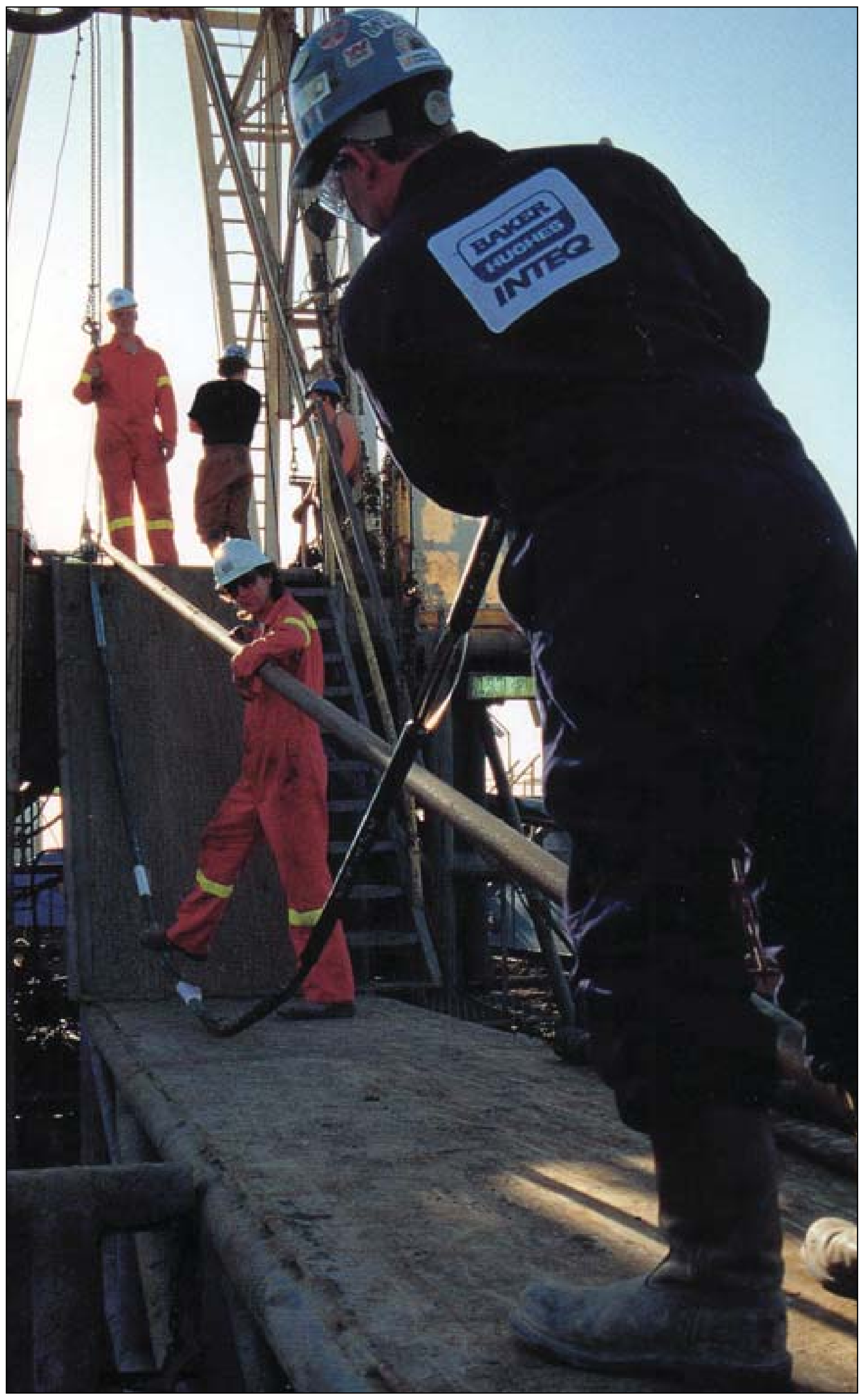
NASA space flight designers and engineers are acutely aware that successful missions require the most exacting technology and the best in human capital — the right stuff.

When it comes to meeting project needs, Baker Hughes INTEQ also makes sure to provide the right stuff — top notch technology and advanced services. By providing integrated solutions from its oilfield group, INTEQ increases efficiency, well by well.

"We can apply the experience and capabilities of the entire Baker Hughes organization to provide the right product, design the right system or plan an integrated solution to meet your objectives," says INTEQ's Alaska Area Manager Dave Reimer. "When a project calls for technology and service from more than one Baker Hughes company, INTEQ and any of our divisions can provide integrated solutions and develop partnerships with customers and contractors. We represent all of Baker Hughes and can commit the company's full resources to meeting the needs of your project."

According to company literature, Baker Hughes has developed technology for every phase of well construction and maintenance and built an organization to deliver solutions that reduce the cost of developing oil and gas. "For example, your project may call for a comprehensive drill bit program from Hughes Christensen, directional well planning from INTEQ, completions systems and methods designed by Baker Oil Tools, electric submersible pump systems engineered by Centrilift or a chemical treatment program from Baker Petrolite.

In addition, OASIS — a division within Hughes Christensen — is the Baker Hughes engineering and consulting service for drilling optimization. OASIS specialists are drawn from a company-wide pool to evaluate difficult drilling situations. And, during project planning, company information specialists use custom software and data base capabilities to prepare the best well bore design to optimize reservoir production.



COURTESY OF BAKER HUGHES INTEQ

Baker Hughes INTEQ applies its full complement of drilling and completion technologies to re-enter old wells and improve their production. Baker Hughes INTEQ's Navi-Trak™ SR MWD probe has flex joints that enable it to guide the wellbore along the tight curve used in short radius re-completions.

COURTESY OF BAKER HUGHES INTEQ

Baker Oil Tools, a company within the Baker Hughes system, offers wide array of completion, stimulating, fishing and workover product lines.

INTEQ increases well efficiency and productivity

Formed through a merger of individual directional drilling and measurement-while-drilling companies, INTEQ has been in Alaska for more than 20 years. Adding value to the drilling process through its products and services, INTEQ delivers advanced drilling technologies and services that increase efficiency and enable precise well placement. Major capabilities include directional drilling, measurement-while-drilling, logging-while-drilling and well-site information management services.

Directional drilling — INTEQ is an industry leader in directional and performance drilling applications, enhanced by the AutoTrak® rotary closed loop drilling system and Navi-Drill® Ultra Series tools. The company's drilling systems have been used in thousands of vertical, horizontal and directional wells around the world.

Measurement-While-Drilling (MWD) — INTEQ offers surface and downhole, information and evaluation technology to help control well placement. "Our systems provide accurate information to help oil companies enhance drilling performance, optimize well placement and gather quantitative information about the reservoir," says Reimer.

Logging-While-Drilling (LWD) — LWD systems provide quantitative, wireline-replacement logs in directional, horizontal or exploration wells for optimal placement.

Well-site information services — Using an array of sensors, hardware, software and Internet technology, the new RigLink data communications service enables clients to access real-time rig site data from any location.

COURTESY OF BAKER HUGHES INTEQ

Baker Hughes workers measure the outer diameter of a mud motor. Baker Hughes supports projects of all sizes, with people experienced in every phase of well construction and maintenance, industry-leading technology and a world-wide service network. Baker Hughes INTEQ serves as the focal point for integrated solutions involving more than one Baker Hughes company.

Products and Services

Applications for Baker Hughes INTEQ drilling systems include offshore development and exploration wells, extended reach wells, horizontal wells, geosteering, performance-drilled straight wells, re-entry wells and coiled tubing drilling.

INTEQ offers a full range of drilling products: directional only, acoustic, nuclear, gamma ray and resistivity. Recent technology developments include:

- TestTrak® for formation testing
- AutoTrak® Rotary Closed Loop System —an integrated rotary steerable drilling and MWD/LWD system that provides precise directional control with continuous drill string rotation
- NaviTrak®/NaviGamma® services —MWD systems that deliver real-time directional and directional/gamma ray information for drilling operations.
- Complete line of LWD tools that provide gamma ray/resistivity and nuclear services for complete formation evaluation
- APX® (Acoustic Properties eXplorer) — LWD acoustic logging tools
- Modular Advanced Pressure (MAP™) tool provides advanced downhole pressure measurements
- VertiTrak ® — drills perfectly straight holes, self-monitoring
- CoilTrak® — coiled tubing drilling
- Xtreme Motors® — new extreme downhole mud motors for directional drilling in a wide range of sizes, configured for directional and straight-hole drilling, hole sizes from 3 7/8 inches to 23 inches.

"We engineer and provide our drilling technology as part of a customized system, including directional and horizontal drilling motors, drill bits, measurement-while-drilling and completions," says Reimer. "This integrated approach can enhance overall drilling performance and maximize the production potential of each well."

Reimer, an engineering graduate from Colorado School of Mines, has been with the company for 22 years. "INTEQ is dynamic … it's always been proactive in providing proper technology and services to help customers drill well and in making sure technologies needed for the next generation are being developed. It's interesting to see how the energy business changes and progresses," he says. "Some of the technology that was brand new when I started are now commonplace. The advancing technology keeps it exciting and interesting… there are always new challenges. It's rewarding to have access to solutions that add value at every step of the process — drilling, completion and production." ●

Editor's note: Susan Braund owns Firestar Media Services in Anchorage, Alaska.

A new era in energy-related construction

ASRC Energy Services Pipeline, Power and Communications diversifies its business to meet new market conditions

By ALAN BAILEY
Petroleum Directory Contributing Writer

In January of this year Houston Contracting Co. became ASRC Energy Services Pipeline, Power and Communications Inc. The renaming and re-structuring took place as part of the rebranding of Natchiq Inc. into ASRC Energy Services. Houston Contracting's subsidiary Global Power and Communications also changed its name to ASRC Energy Services Power and Communications.

And with the current slowdown in work on Alaska's North Slope, the rebranding came at just the right time — diversification from oil and gas into broader energy-related construction work within and outside Alaska is enabling ASRC Energy Services Pipeline, Power and Communications to maintain a full order book.

"You can characterize Pipeline, Power and Communications as an energy services company" Warren Christian, company president, told Petroleum News, "Our work is concentrated in mechanical, electrical, industrial projects ... we've switched our focus away from just building cross-country pipelines."

ASRC Energy Services Pipeline, Power and Communications now constitutes one of three business units within ASRC Energy Services, a subsidiary of Arctic Slope Regional Corp. Arctic Slope Regional Corp. is an Alaska Native regional corporation.

As well as broadening the company focus, rebranding more closely identifies ASRC's subsidiary companies with the regional corporation, Jack Laasch, ASRC Energy Services' executive vice president for strategic development and external affairs, said. The company re-organization is also streamlining our management structure and enabling more efficient use of personnel, Laasch said.

The three businesses within ASRC Energy Services complement each other as a team. As a result, ASRC Energy Services Pipeline, Power and Communications can enlist expertise such as engineering design from the other businesses.

High reputation

With its long-serving cadre of dedicated employees, Christian expects ASRC Energy Services, Pipeline Power and Communications to maintain the prominent reputation of Houston Contracting and Global Power and Communications.

"We have a loyal and dedicated workforce. Our superintendents have worked for Houston for years and years — our work crews are superb," Christian said. "... There are multiple generations of employees working for our company. And, as a matter of fact, our shareholder employment is very important to me personally and our company. One of our core values is to hire, train, promote and retain ASRC shareholders."

COURTESY OF ASRC ENERGY

Watson 3000 Air Drill, drilling holes for vertical support member's installation for Northstar.

And the company staff has maintained an excellent and enviable safety record.

"Pipeline, Power and Communications has a great reputation with our clients to complete projects safely," Christian said.

The company also enjoys an exceptional relationship with its unions.

"We are very pleased with our union affiliations — we're a union company because we want to be," Christian said. "We get highly skilled craftsmen from the unions ... they're definitely an important and large part of our success."

Long history

As Houston Contracting, the company's exemplary record in pipeline construction goes back to the 1930s.

"By the '60s Houston had projects worldwide," Christian said. "By 1970 it was active in Alaska and was acquired by ASRC in '85."

The company's more notable achievements include the first Arctic subsea pipeline for the Northstar field. The Northstar project involved bundling several pipelines together and laying them through the sea ice, Laasch said. The company also handled the construction of the Alpine pipeline on the North Slope — the first pipeline in the Arctic that involved directional drilling.

In the construction of the Badami pipeline on the North Slope the company participated in pioneering the alliance team approach to a project.

"Badami was the first alliance project on the North Slope," Christian said. "We completed the project on time and within budget."

COURTESY OF ASRC ENERGY

48" Pipe Bridge being installed across the Putt River to act as a carrier for the Northstar oil pipeline.

Recent pipeline work

ASRC Energy Services Pipeline, Power and Communications is also continuing Houston Contracting's tradition of pipeline construction.

"We successfully completed the Kenai Kachemak Pipeline (for Marathon and Unocal) last year," Christian said.

In another recent Alaska project the company replaced a section of the Enstar gas line that runs from Cook Inlet to the Matanuska-Susitna Valley. The replacement section required a 4,300-foot directional drill under the Susitna River.

The company has extended its business in the Lower 48 — it has offices in the Pacific Northwest and Houston, Texas, in addition to those in Anchorage, Fairbanks and Deadhorse, Alaska.

In the Lower 48, the company is currently working for Williams on an eight-and-a-half mile gas pipeline in Everett, Wash.

In its recent work the company has drawn on its experience of utilizing directional drilling on its projects — most pipeline projects nowadays use directional drilling techniques to string pipelines under natural and man-made obstacles such as rivers and roads, Christian explained.

"There is a very small footprint at the construction site," Christian said. "They just drill under the river and the drilling mechanism grabs the pipe and pulls it through."

Power and communications

The company's Power and Communications subsidiary builds power transmission lines, fiber optic communications systems, power distribution systems and commercial electrical installations.

"We've built electrical transmission projects like the Golden Valley Intertie — that was a rather and unique and challenging project," Christian said. "We installed the tallest and heaviest structures used in Alaska during the last 10 years, and the span across the Tanana River was the longest during that same time period." The company also builds and maintains electrical distribution systems including systems for the North Slope Borough and the Department of Defense.

Power and Communications is also the locate contractor for the Anchorage area. Company specialists use utility maps and special equipment to locate buried electrical lines and other utility structures.

Power and Communications has amassed several years of experience in laying fiber optic cable. Although there's relatively little installation of new fiber optic line at the moment, the company is doing some communications work for the Department of Defense and recently signed a contract for communications work for Copper Valley Telephone Cooperative in Alaska.

Diversification

As part of its diversification strategy, ASRC Energy Services Pipeline, Power and Communications is performing electrical and mechanical construction for the Department of Defense at Fort Greely, Alaska, and at Vandenberg Air Force Base in California.

The company is also the maintenance contractor for the trans-Alaska pipeline and the Valdez Marine Terminal.

"We perform maintenance and execute projects along the entire 800 miles of the trans-Alaska pipeline," Christian said.

Periodically the pipeline is shut down, enabling the company to perform specific maintenance work, which is not possible during normal operations. Careful planning and efficient work minimize down time for the pipeline system.

And so, ASRC Energy Services Pipeline, Power and Communications is using a wide variety of assignments to ride the current dip in oil and gas construction projects in Alaska. However, with plenty of potential for future oil and gas development in the state, Christian and Laasch think that activity in Alaska will return, although not at such a large scale as in the past and with more involvement from the independent oil companies.

"The infrastructure is in place now and the big fields are in decline, so the magnitude of the projects that come up is going to be significantly smaller than what we've experienced in the past," Laasch said.

Meantime, ASRC Energy Services Pipeline, Power and Communications continues to pursue its diversification strategy.

"Right now our focus is going to be mostly on our diversification efforts until the Alaska oil and gas market rebounds," Christian said. "Ninety-eight percent of our work was on the North Slope six years ago. This year it's zero."

In fact, all of the businesses within ASRC Energy Services have positioned themselves to respond flexibly to whatever energy-related services the market needs.

And that flexibility seems to be the way of the future. ●

Editor's note: Alan Bailey owns Badger Productions in Anchorage, Alaska

COURTESY OF HANOVER CANADA

A typical lease package from Hanover Canada. This particular three-stage package includes a Waukehsa 5790GL driver (1215 HP) with Ariel JGK/4 compressor, built for up to 2 percent sour service. Hanover has the largest compressor lease fleet at 3.7 million hp worldwide.

COURTESY OF HANOVER CANADA

Hanover Canada: Comprehensive, innovative oil patch solutions

Canadians continually develop new technologies to enhance energy development; Albertans have history of world-class, innovative performance

By SUSAN BRAUND

Petroleum Directory Contributing Writer

Since the world's first oil well was drilled in Oil Springs, Ontario, Canada, in 1857, Canadians have had oil fever. They have designed, built and now operate a huge network of pipelines and a natural gas pipeline system that supplies 45 percent of North American natural gas requirements, according to the Alberta Department of Economic Development, and they continue to be at the forefront of technological change in the industry.

With its vast reserves of oil and natural gas, Alberta ranks as one of the world's top energy producers, trading with more than 150 countries. The province's economy and technology infrastructure is based on the oil and gas industry. One Alberta company keeping pace with needs of the oil patch is Hanover Canada, a manufacturer and worldwide supplier of quality oil and gas production equipment, natural gas compression services, treatment services, compressor fabrication, and measurement services. Operating in the Western Hemisphere, including Argentina, Venezuela, Mexico and Canada, the company is expanding into Europe, Asia, and Australia.

Since 1997, the Calgary, Alberta-based Hanover Canada, in association with fabricator Hanover Maloney, has been doing business in complementary arenas: natural gas compression leasing and used unit sales and oil and gas production equipment.

"We're dedicated to the rental, leasing and lease-purchase of compression and production equipment for the Canadian oil and gas industry," says Hanover's Country Manager Rod Saville. "We have a variety of compressors, both screw compression packages and reciprocating gas compressors and we're capable of providing process, mechanical and instrument design engineering for any production equipment projects, including industry standard separators, heaters, and dehydrators. Just tell us what you need done and we'll get it done. Hanover has the resources for your natural gas compression and processing needs."

Saville started in the engineer services industry in 1991, doing vibration/pulsation control on reciprocating gas compressors. After several years he took a position at the Sable Offshore Energy Project as mechanical engineer with responsibilities in design, construction, installation and commissioning. He joined Hanover three years ago as operations manager overseeing the lease fleet and received a promotion to country manager in 2004.

COURTESY OF HANOVER CANADA

View of Hanover Maloney's back storage lot in Calgary, Alberta, Canada. The Calgary shop is one of several in the Hanover system that can produce design/manufacturing services for domestic and international customers.

Hanover Maloney fabrication shop

In July 2000, Hanover acquired the Calgary-based 40-year-old Canadian firm Maloney Inc., forming Hanover Maloney. The fabrication shop, with its staff of qualified engineers, designers, drafts people, manufacturing personnel and support staff, has established a reputation worldwide for its skid mounted dehydration units, sulphur recovery plants and gas treating facilities.

Hanover Maloney's product line consists of medium to large comprehensive oil and gas production facilities including heaters, separators, dehydrators, oil emulsion treaters, free water knock outs, slug catchers, coalescers, precipitators, production systems, gas sweetening units, sulphur recovery plants, dew-point control and hydrocarbon recovery plants, and custom design processing packages.

Technology engineers and designers have developed extensive computer-based process and design programs to ensure the highest quality and most reliable end products. In-house quality assurance staff facilities are above and beyond specifications required by Alberta Boiler and Safety Association and American Society of Mechanical Engineers. Also, API and ASME code equipment can be manufactured to comply with NACE and 14C offshore specifications.

"There is lots of design expertise in the Calgary shop. It's one of several in the Hanover system that can produce design/manufacturing services for domestic and international customers. That's one of the advantages of being part of a large company — the depth of services. The shop is a cost center that can build things expertly for customers all over the world. It's known as a high-spec, capable shop. Hanover Canada is actually a customer of the shop."

Lease fleet

Hanover Canada owns and operates a fleet of 170 compressor units, ranging from 50 hp to 1600 hp.

"Hanover has the largest compressor lease fleet at 3.7 million hp worldwide. We're a little piece of that with 85,000 hp, the largest lease fleet in Canada," says Saville. "Leasing is a growing field in Canada. We're hoping it will follow the U.S. model with end users doing much more gas compressor leasing. Compressors are depreciating assets, and site specific. If the end users will lease vehicles, they should start looking at when it's attractive to lease compression. We're always working towards understanding the lease vs. purchase point better ourselves to help our customers."

Stocking program

Years of experience has provided Hanover with data about the most common industry needs, which led to the company's newly launched stocking program, offering packaged, ready-to-go standard dehydration and separation packages for quick delivery. "If a client says they need it in two weeks, we can now offer delivery right away. If they need a set up with a two-inch ball valve and we have a stock package with a 1.5-inch valve, they'll usually say OK. It's a good product with good prices in a competitive market. Hanover's business is solving customers' problems and assisting them to improve their operations and meet their goals."

Saville contends that Hanover Canada stands above its competition in three ways: availability, amounts of equipment and quick delivery. "Our lease fleet has the most equipment ready to go of anyone in the game and we're working towards the same with our stocking program. As quick as customers can get a truck to the yard, they're ready to go. Hanover can provide a range of products. Eventually we'll be a one-stop shop."

Challenges

Hanover started small in 1990 and quickly grew their lease fleet in the United States. This further led into acquiring similar companies, 49 acquisitions in 11 years. Now the company has reached critical mass and it's time to standardize.

"Our biggest opportunity is bringing the company together. Hanover is a big machine with offices in the UK, Italy, Venezuela, Argentina, Canada and the United States among others," says Saville. " Our CEO, Chad Deaton, is implementing a large measure to help the company act as one well-oiled machine and we want to be able to channel our expertise through our international VPs and be more cost effective in more developed arenas … It's an ongoing effort." The cornerstone of the effort is a new computer system that allows bearers of company expertise to travel from one venue to another and use familiar, consistent processes.

"We've basically implemented it in Canada, and are starting to see some of the synergy happening, some cross pollination of offices using the same processes." ●

Editor's note: Susan Braund owns Firestar Media Services in Anchorage, Alaska.

COMPANY NEWS

Chiulista Camp Services acquires Mayflower Catering

GEORGE GARDNER

Chiulista Camp Services said May 20 that it has purchased the assets and operations of Anchorage-based Mayflower Catering, effectively expanding the company's line up of camp and exploration services to include catering in Anchorage and several other communities across the state.

A subsidiary of Calista Corp., Chiulista provides remote-site camp services for the petroleum, mining, fishing and construction industries.

"Chiulista is proud to now add specialty catering to our growing list of products and services," Chiulista President George Gardner said. "It gives us an Anchorage presence, fits in very well with our overall plans for growth in Alaska, and will soon be very useful as a tool to promote training for Calista Corp. shareholders that are interested in careers in the culinary arts field."

Calista, the second largest ANCSA corporation in the state, represents 56 villages in the Yukon-Kuskokwim Delta and is owned by more than 13,000 Yup'ik, Cup'ik and Athabascan shareholders with ancestral ties to Southwest Alaska.

Calista also has the rights to 6.5 million acres of subsurface and 300,000 acres of surface estate in Alaska.

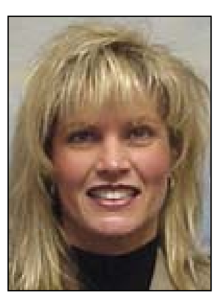
The corporation's primary areas of business are government and private sector contracting, real estate, camp and exploration services, oil industry, newspaper publishing and printing and natural resource development.

Calista, along with project manager Placer Dome US, is working to develop Donlin Creek into an operating gold mine.

For information, or to access Mayflower Catering menus, go to www.anc-biz.com/mayflowercatering.com, or call 907-274-2223.

—PETROLEUM NEWS

New sales executive at Northern Air Cargo



NORTHERN AIR CARGO

DOROTHY DIAMOND

Dorothy Diamond has been added to the sales and marketing staff at Alaska's Northern Air Cargo. She will be an account manager for several of the company's cargo hubs, and will work in marketing to governmental clients.

Diamond has worked most of her career in government, sales and management in Anchorage and Ketchikan. She has a degree in business analysis from the University of Alaska Anchorage.

Her hiring was announced May 20.

—PETROLEUM NEWS

New president for VECO Alaska

COURTESY OF VECO

CHUCK O'DONNELL

Charles F. (Chuck) O'Donnell has been promoted to president and general manager of VECO Alaska Inc. O'Donnell's role will include responsibility for all VECO Corp. operating entities within the Alaska region.

O'Donnell worked for Alyeska Pipeline Service Co. for 23 years before joining VECO in 2000 as a senior project manager. He became vice president of project operations for VECO Alaska in 2002.

O'Donnell is replacing Val Molyneux, who is moving to a role in the parent VECO Corp. Molyneux, a 30-year employee, led VECO Alaska for five years.

The promotion was announced by VECO Corp. President Pete Leathard on April 23.

—PETROLEUM NEWS

WesternGeco completes first Q-marine survey in Danish sector of North Sea

WesternGeco said June 8 that it has completed acquisition of a Q-Marine seismic survey for the Danish Oil and Natural Gas Co. over the Siri field in the North Sea. The 128-square-kilometer, high-resolution Q survey was acquired in May over a 1996 heritage survey and will include 4D processing of the vintage data.

"WesternGeco Q-Technology was selected for this monitor survey because of the high activity level in the area where the increased spatial Q-marine sampling could enhance noise reduction," said Jesper Wissendorf Hansen, operations geophysicist with Danish Oil and Natural Gas. "Furthermore, the steerable streamers added a safety element to the work around the installations in the area, in addition to the advantage of steering the feather."

The survey was conducted in two phases, WesternGeco said. First, the Q-Technology vessel Western Pride, towing six 3,200-meter cables with 100-meter separation, repeated the 1996 survey. An interleaved pass then increased data density and will be used for enhanced imaging.

"The high repeatability and superior resolution of the Q survey will enable improved knowledge of the Siri field," said Roar Bekker, manager, WesternGeco Europe.

—PETROLEUM NEWS

COMPANY NEWS

Schlumberger buys software, consulting firm

Schlumberger Information Solutions has acquired the assets of Decision Team, an Austrian company that provides oil and gas software and consulting services.

Schlumberger didn't disclose the price it paid for the acquisition, announced May 13.

Decision Team adds a new suite of intelligent reservoir surveillance software to the Schlumberger arsenal. The software, called DECIDE!, "intelligently captures, analyzes, conditions and transforms both historical and real-time production data into actionable operational decisions," according to a press release from Schlumberger.

The software's notification systems provide ranking lists of those wells that are under performing, and automated event detection replaces routine field surveillance, resulting in significant time saving, according to the company.

Decision Team has been based in Baden, Austria.

—PETROLEUM NEWS

Phone: (907) 278-6600
Fax: (907) 278-3255
Email: bstinson@conamco.com
Oil, gas, and mining facility; pipeline, civil, and commercial construction.

Hanover Canada
500, 101-6 Ave. SW
Calgary, AB, T2P 3P4 Canada
Contact: Rod Saville, Country Mgr. Canada
Phone: (403) 261-6801
Fax: (403) 266-1066
Email: info@hanover-co.com
Web site: www.hanover-canada.com
Hanover Canada is the leading provider of natural gas compression services and equipment in Canada. We maintain an 85,000 horsepower rental compression fleet in Canada and over 3.6 million horsepower rental fleet worldwide. Hanover custom designs production equipment in accordance with customer's specifications using strict internal engineering standards. We have the capability to provide process, mechanical and instrument design engineering for any production equipment project worldwide.

Kenworth Alaska
2838 Porcupine Dr.
Anchorage, AK 99501
Contact: Jim Scherieble, branch mgr.
Phone: (907) 279-0602
Phone: (800) 478-0602
Fax: (907) 258-6639
Email: parts@kenworthalaska.com
Email: sales@kenworthalaska.com
Website: www.kenworthalaska.com
Fairbanks office:
3730 Braddock St.
Fairbanks, AK 99701
Contact: Ed Lewis, branch mgr.
Phone: (907) 455-9900
Fax: (907) 479-8295
Kenworth Alaska is a full service truck dealership in two locations – Anchorage and Fairbanks. New and used truck sales, parts and service.

NEI Fluid Technology
3408 Arctic Blvd.
Anchorage, AK 99503
Contact: Kathryn Russell, president
Phone: (907) 561-4820
Fax: (907) 562-2316
Email: neifluid@ptialaska.net
Suppliers of petrochemical refueling and testing equipment, meters and valve systems for the oil and gas industry and portable measurement for petroleum, chemicals and bulk liquids. We also supply refrigerant recovery and recycling equipment.

Peak Oilfield Service
2525 C St., Ste. 201
Anchorage, AK 99503
Contact: Bill Stamps, business development/ex. affairs
Phone: (907) 263-7000
Fax: (907) 263-7070
Email: billstamps@peakalaska.com
Web site: www.peakalaska.com
Alaska based general contractors.

Petroleum Equipment & Services
5631 Silverado Way, Ste G
Anchorage, AK 99518
Contact: Kevin Durling/Donald Parker
Phone: (907) 248-0066
Fax: (907) 248-4429
Email: sales@pesiak.com
Web site: www.pesiak.com
P.E.S.I. provides both conventional and specialty products and services for the Alaska oil industry. Regardless of your location, you will receive products and service that is guaranteed to meet your requirements. for Alaska oil industry.

Quadco
6116 Nielson Way
Anchorage, AK 99518
Contact: David Baggett, vp, AK mgr.
Phone: (907) 563-8999
Fax: (907) 563-8985
Email: dbaggett@quadcoinc.com
Other offices: Farmington NM, Denver CO, Casper WY
Quadco maintains a fleet of oil field instrumentation, solids control and other equipment for oilfield and industrial needs. We represent Varco Oil Tools, MD Totco, Texas Oil Tools, SPM, Derrick Equipment and various other manufacturers. 24 hours on call

Totem Equipment & Supply
2536 Commercial Dr.
Anchorage, AK 99501
Contact: Mike Huston, vp
Phone: (907) 276-2858
Fax: (907) 258-4623
Email: sales@toteminc.com
Web site: www.toteminc.com
Totem Equipment & Supply Inc. locally owned and operated since 1961. Supplies light, medium and heavy equipment. Specializing in temporary and permanent heating solutions.

Travco Industrial Housing, Ltd.
1507 8 St.
Nisku, Alberta, Canada
Contact: Stewart Orange, sales rep.
Phone: (888) 387-2826
Fax: (780) 955-8938
Email: sorange@ptigroup.com
Web site: www.travco.ca
Travco is a world-class manufacturer of industrial and commercial modular structures. Our modular structures are used around the world as work camps, offices, wellsites, resorts, schools, etc.

Expeditor/Clerk Services

Chiulista Camp Services/Mayflower Catering
6613 Brayton Dr., Ste. C
Anchorage, AK 99507
Contact: George B. Gardner, pres/gm
Phone: (907) 278-2208
Fax: (907) 677-7261
Email: ggardner@calistacorp.com
The 100 percent Alaska Native owned and operated catering company on the North Slope, catering and housekeeping to your tastes, not ours.

Well Safe Inc.
209 E. 51st Ave.
Anchorage, AK 99503
Contact: Ken Carroll, district mgr.
Phone: (907) 743-9871
Fax: (907) 743-9872
Email: kcarroll@wellsafe.com
Web site: www.wellsafe.com
A full service safety company specializing in remote medical support, expedi-

tors, confined space rescue teams, H2S and safety consultants, OSHA training and rental/sales of gas detection and breathing air systems.

Fertilizer

Agrium
P.O. Box 575
Kenai, AK 99611
Contact: Lisa Parker, govt. relations
Phone: (907) 776-3275
Fax: (907) 776-5579
Email: lparker@agrium.com
Web site: www.agrium.com
Value added manufacturer of fertilizer products.

Financial Services

Dynamic Capital Management
471 W. 36th Ave., Ste. 201
Anchorage, AK 99503
Contact: David Gottstein
Phone: (907) 562-6374
Toll free: (800) 280-3962 (DYNA)
Fax: (907) 563-9502
Alaska money management firm, offering experienced professional judgement, leading edge technology, and customized portfolios. Individual and corporate clients.

UBS Financial Services, Inc.
3000 A St., Ste 100
Anchorage, AK 99503
Contact: Steven Lukshin, financial adviser
Phone: (907) 261-5914
Toll Free: (866) 261-5914
Fax: (907) 261-5990
Email: steven.lukshin@ubs.com
Web site: www.ubs.com/fa/stevenlukshin
UBS Financial Services is a leading U.S. financial service firm serving individuals, corporations and institutions offering investments, cash management and 401(k) services

Fire Protection

Arctic Fire & Safety
702 30th Ave.
Fairbanks, AK 99701
Contact: Bobby, Shane, Gigi
Phone: (907) 378-2116
Fax: (907) 452-7876
Email: arcfire@yahoo.com
Your Alaskan owned safety specialist since 1975. Extinguisher recharging and sales, alarm/system service, NFPA P.P.E., clothing, MSA airpacks, hydro testing, fire vehicles and accessories, TIC's.

MEDC International
5829 West Sam Houston Pkwy, North, Ste.1005
Houston, TX 77041
Contact: Phil Hausman, U.S. sales mgr.
Phone: (713) 937-9772
Fax: (713) 937-9773
Email: phausman@medcint.com
Other Office: MEDC Ltd. – UK
Website: www.medc.com
MEDC design, manufacture and sell a range of UL/CENELEC approved field devices for fire & gas and communications systems for use in potentially explosive atmospheres.

Freight/Shipping & Cargo

Air Logistics of Alaska
1915 Donald Ave.
Fairbanks, AK 99701
Phone: (907) 452-1197
Fax: (907) 452-4539
Contact: Dave Scarbrough
Phone: Anchorage: (907) 248-3335
Email: dscarbrough@airlogak.com
Helicopter contract and charter services.

Alaska Airlines Cargo
P.O. Box 68900
Seattle, WA 98168
Contact: Keola Pang-Ching, director, cargo sales
Phone: (206) 433-3122
Fax: (206) 433-3225
Email: Keola.pang-ching@alaskaair.com
Award winning cargo services to more places, more often, with more lift to, from, and within the state of Alaska.

Alaska Railroad Corp.
P.O. Box 107500
Anchorage, AK 99510


COURTESY OF HANOVER CANADA

A typical lease package from Hanover Canada. The particular three-stage package includes a Waukehsa 5790GL driver (1215 HP) with Ariel JGK/4 compressor, built for up to 2 percent sour service. Hanover has the largest compressor lease fleet at 3.7 million hp worldwide. See the company profile on page B13.

Contact: Katie Bender, Marketing and Logistics Technician
Phone: (907) 265-2485
Fax: (907) 265-2597
Email: benderk@akrr.com
The Alaska Railroad Corporation offers real estate, passenger and freight services – including complete services to move your freight between Alaska, the Lower 48 and Canada.

Alaska Terminals
400 W 70th Ave., Ste.3
Anchorage, AK 99518
Contact: Calista Wood
Phone: (907) 349-6657
Fax: (907) 349-2045
Email: akbestmove@akterminals.com
Web site: www.akterminals.com
Other Offices:
Mitchell Moving & Storage, Seattle
Glacier State Moving & Storage, Fairbanks
Alaska Terminals provides full service household goods relocation services to, from, and within Alaska. International, and local residential and office moves; heated, and secured storage.

Brooks Range Supply
Pouch 340008
1 Old Spine Road
Prudhoe Bay, AK 99734
Contact: Mike Kunkel/Craig Welch, general managers
Phone: (907) 659-2550
Toll Free: (866) 659-2550
Fax: (907) 659-2650
Email: brooks@astacalaska.com
Expediting and delivery of hardware and more throughout oilfield and North Slope villages. Open 24 hours, 365 days a year. Toll free number 866-659-2550.

CN Aquatrain
3015 Madison Way
Anchorage, AK 99508
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.

Carlile Transportation Systems
1800 E. 1st Ave.
Anchorage, AK 99501
Contact: Linda Leary
Ph: (907) 267-7797
Fax: (907) 276-6786
Email: lleary@carlilekw.com
Other Offices: Fairbanks, Prudhoe Bay, Kenai, Seward, Federal Way, WA, Houston, TX, Edomonton, ALTA
Alaska owned and operated, full service, multi-modal, transportation and logistics company.

Crowley Alaska
2525 C St., Ste. 303
Anchorage, AK 99503
Contact: Craig Tornga
Phone: (907) 278-4978
Fax: (907) 257-2828
Email: cms.@crowley.com
Marine transportation throughout Alaska. North Slope heavy hauling with CATCO all-terrain vehicles.

ERA Aviation
6160 Carl Brady Drive
Anchorage, AK 99502
Contact: Bryan Blixhavn
Phone: (907) 248-4422
Fax: (907) 266-8383
Email: info@eraaviation.com
Web site: www.eraaviation.com
Helicopter and fixed wing contract and charter services; scheduled airline service.

F.S. Air
6121 S. Airpark Place
Anchorage, AK 99502
Contact: Sandra Butler
Phone: (907) 248-9595
Fax: (907) 243-1247

Kenai Aviation
P. O. Box 46
Kenai, AK 99611
Contact: Bob or Jim Bielefeld
Phone: (907) 283-4124
Phone: (800) 478-4124 (within Alaska)
Fax: (907) 283-5267
Email: kb@chugach.net
Air taxi services provided since 1961 state wide, mostly Cook Inlet. Single engine and twin Bonanza.

Lynden
Alaska Marine Lines
Alaska Railbelt Marine
Alaska West Express
Lynden Air Cargo
Lynden Air Freight
Lynden International
Lynden Logistics
Lynden Transport
6441 S. Airpark Pl.
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.

Northern Air Cargo
3900 W. International Airport Rd.
Anchorage, AK 99502
Contact: Nick Karnos, acct. mgr.
Anch./Prudhoe Bay
Phone: (907) 249-5161
Fax: (907) 249-5194
Email: nkarnos@nac.aero
Web site: www.nac.aero
Serving the aviation needs of rural Alaska for almost 50 years, NAC is the states largest all cargo carrier moving nearly 100 million pounds of cargo on scheduled flights to 17 of Alaska's busiest airports. NAC's fleet of DC-6, B-727, and ATR-42 aircraft are available for charters to remote sites and flag stops to 44 additional communities.

Northern Transportation
310 K St., Ste. 200
Anchorage, AK 99501
42003 McKenzie Hwy.
Hay River, NWT X0E0R9
Contact: John Marshall
Phone: (867) 874-5167
Fax: (867) 874-5179
Email: jmarshall@ntcl.com
Web site: www.ntcl.com
Marine transportation along the McKenzie River to the Beaufort Sea and Alaska's North Slope.

Northwestern Arctic Air
6231 S. Airpark Pl.
Anchorage, AK 99502
Contact: Judy McClellan, office mgr.
Phone: (907) 245-4566
Fax: (907) 245-4567
Email: pugslie@pobox.alaska.net
Web site: www.NWArcticAirAK.com
All jet fleet 24/7. Large cargo doors accommodate long drilling equipment. HAZMAT and express package delivery services provided. Member Medallion Foundation.

Oilfield Transport
6816 Lowell Cir.
Anchorage, AK 99502
Contact: Henry Minich
Phone: (907) 229-9647
Fax: (907) 245-8930
Email: henryminich@aol.com
Complete on-site rig service and logistics since 1975. Highway and remote transportation of equipment via barge or air, for mining or oilfield projects, to any location in Alaska.

Panalpina
4305 W. International Airport Rd.
Anchorage, AK 99502
Contact: John Hodel, branch mgr.
Phone: (907) 245-8008
Fax: (907) 245-8018
Email: john.hodel@panalpina.com
Web site: www.panalpina.com
Other offices:
Houston: (281) 446-0600
Calgary: (403) 291-1137
International and domestic freight forwarding and logistics services. Integrated solutions for supply chain management. Specialists in oil and energy projects.

Renew Air Taxi
P.O. Box 61230
Fairbanks, AK 99706
Contact: Bob Wener
Phone: (907) 457-7287
Fax: (907) 457-7288
Email: renew1@aol.com
Web site: www.RenewAir.com
Other Office:
Dillingham, AK 99576
Phone: (907) 842-3440
Turbine Otter air support for remote seismic exploration, mining and construction sites. Cargo, fuel and passengers on wheels, wheel skis and amphibian floats.

Span-Alaska Consolidators
8130 S. 216th St.
Kent, WA 98032
Contact: Tom Landry, executive v. p.
Phone: (800) 257-7726
Phone: (907) 349-3606 (Anchorage)
Fax: (253) 395-7986
Email: toml@spanalaska.com
Website: www.spanalaska.com
Alaskan freight consolidator/forwarder serving all of Alaska with timely and friendly service. Inbound service from the Lower 48 to Alaska. "Promises Made, Promises Delivere

TOTE-Totem Ocean Trailer Express
2511 Tidewater Road
Anchorage, AK 99501
Contact: Curt Stoner
Phone: (907) 265-7215
Phone: (800) 234-8683
Fax: (907) 278-9689
Email: cstoner@totemocean.com
Web site: www.totemocean.com
TOTE's roll on/roll off ships sail two times per week between the Port of Tacoma and the Port of Anchorage. Transit time is a fast 66 hours.

Fueling Services

Colville
Pouch 340012
Prudhoe Bay, AK 99734
Contact: John Daly, Kevin Cilk
Phone: (907) 659-3197
Fax: (907) 659-3190
Email: prudhoe1@aol.com

Diesel, gasoline, jet fuel, aviation gasoline in bulk and small quantity deliveries, electronic card-lock fleet management, solid waste and recycling, industrial gases and solid waste. Tesoro fuel station.

General Oilfield Supplies

Alaska Tent & Tarp
529 Front St.
Fairbanks, AK 99701
Contact: Jim Haselberger
Phone: (907) 456-6328
Phone: (800) 478-8368
Fax: (907) 452-5260
Email: aktent@ptialaska.net
We are a commercial and industrial fabric business. We make covers.

MRO Sales
5631 Silverado Way, Unit G
Anchorage, AK 99518
Contact: Don Powell
Phone: (907) 248-8808
Fax: (907) 248-8878
Email: Sales1@mrosalesinc.com
Web site: www.mrosalesinc.com
Other offices:
Kenai: Al Hull (907) 335-2782
MRO Sales offers products and services that are special to the Alaskan market. MRO can help solve the time problem on hard to find items.

NEI Fluid Technology
3408 Arctic Blvd.
Anchorage, AK 99503
Contact: Kathryn Russell, president
Phone: (907) 561-4820
Fax: (907) 562-2316
Email: neifluid@ptialaska.net
Suppliers of petrochemical refueling and testing equipment, meters and valve systems for the oil and gas industry and portable measurement for petroleum, chemicals and bulk liquids. We also supply refrigerant recovery and recycling equipment.

Geophysical & Geological Services

ASRC Energy Services – Engineering and Technology
3900 C St.
Anchorage, AK 99503
Contact: John Lewis, vp operations
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: john.lewis@asrcenergy.com
Web site: www.asrcenergy.com
Drilling and completion engineering, well stimulation, facilities engineering, upstream exploration and production services, geological and geophysical services, automation, electrical and instrumentation, platform renovation and construction.

ENSR International
1835 S. Bragaw St., Ste. 490
Anchorage, AK 99512
Contact: Chris L. Humphrey, P.E.
Phone: (907) 561-5700
Fax: (907) 273-4555
Email: chumphrey@ensr.com
Serving Alaska since 1977. ENSR is an environmental engineering and consulting firm with more than 70 offices worldwide providing environmental planning, assessment, permitting, compliance management and contamination cleanup.

Golder Associates
1750 Abbott Rd., Ste. 200
Anchorage, AK 99507
Contact: Bob Dugan, mgr., Tom Krzewinski, Mark Musial, Bucky Tart
Phone: (907) 344-6001
Fax: (907) 344-6011
Website: www.golder.com
Providing geotechnical engineering, water resource, and geosciences services in support of resource development projects in Alaska and the Arctic. Other offices worldwide.

Hunter 3-D
9898 Bissonnet St., Ste. 362
Houston, TX 77036
Contact: Dan Huston, vice president
Phone: (713) 981-4650
Fax: (713) 981-4650
Email: hunter3d@wt.net
Web site: www.hunter3dinc.com
Hunter 3-D is a geophysical consulting company based in Houston, Texas. We interpret seismic, gravity and magnetic data for projects in Alaska and worldwide.

Petrotechnical Resources of Alaska (PRA)
3601 C St., Ste. 1378
Anchorage, AK 99503
Contact: Tom Walsh
Phone: (907) 272-1232
Fax: (907) 272-1344
Email: info@petroak.com
Our multidisciplinary staff of qualified and experienced professionals possess a diverse array of technical capabilities to provide our clients with a full spectrum of geoscience and engineering consulting services.

PGS Onshore
341 W. Tudor Rd., Ste. 206
Anchorage, AK 99503
Contact: Larry Watt, Alaska area mgr.
Phone: (907) 569-4049
Fax: (907) 569-4047
Email: larry.watt@pgsonshore.com
Houston Office
738 Hwy 6 South, Ste 900
Houston, TX 77079
Contact: Gehrig Schultz
Phone: (281) 589-6732
Fax: (281) 589-6685
Email: gehrig.schultz@pgsonshore.com
Geophysical acquisition and processing for the petroleum industry. PGS Onshore provides fully rubber tracked Arctic geophysical crews to acquire the highest density data with the softest environmental footprint on the North Slope.

Schlumberger Oilfield Services
2525 Gambell St.
Anchorage, AK 99503
Contact: Daniel Palmer
Phone: (907) 273-1700
Fax: (907) 561-8317
Email: Palmer2@slb.com
Web site: www.slb.com
Schlumberger Oilfield Services provides people and technology, working together to offer exploration and production solutions for the life of oil and gas reservoirs.

Health Care Professionals

Aeromed International
4700 Business Park Blvd., Ste. E25
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 car air ambulance fleet based in Anchorage. Medical crews are certified Flight Nurses and certified Flight Paramedics.

Alaska Massage & Bodyworks
Hilton Anchorage Fitness Center
500 W. 3rd Ave.
Anchorage, AK 99501
Contact: Patricia Main
Phone: (907) 240-6880
Email: amb@akmassage.com
Web site: www.akmassage.com
Alaska Massage & Bodyworks is the in-house professional massage therapy service at the Hilton Anchorage Hotel. Sessions are available for hotel guests and Anchorage residents. The service is available seven days a week on the fifth floor of the hotel. Patricia Main, a certified massage therapist, owns and operates the service. The staff has specialized training in Swedish, deep tissue, injury treatment and trigger point massage.

ArrowHealth Corp.
4050 Lake Otis Pkwy., Ste. 207
Anchorage, AK 99508
Contact: Lea Counts, dir. Substance Abuse Testing Div.
Phone: (907) 868-8885
Fax: (907) 868-8882
Email: arrowh@myexcel.com
Web site: www.arrowhealthcorp.com
ArrowHealth is Alaska's premier service provider of occupational health and substance abuse testing. We service the local community, national contracts, and government agencies alike with customized solutions.

Worksafe
300 W. 36th Ave., Ste. A
Anchorage, AK 99503
Phone: (907) 563-8378
Fax: (907) 563-8380
Web site: www.worksafeinc.com
Worksafe works to keep your employees from getting hurt on the job if they are using drugs or alcohol. Worksafe Drug Testing increases productivity, reduces liability with fewer injuries and accidents and provides insurance cost savings.

Helicopter Contract & Charter Services

Air Logistics of Alaska
1915 Donald Ave.
Fairbanks, AK 99701
Phone: (907) 452-1197
Fax: (907) 452-4539
Contact: Dave Scarbrough
Phone: Anchorage: (907) 248-3335
Email: dscarbrough@airlogak.com
Helicopter contract and charter services.

Era Aviation
6160 Carl Brady Dr.
Anchorage, AK 99502
Contact: John Holland
Phone: (907) 248-4422
Fax: (907) 266-8383
Helicopter and fixed wing contract and charter services; scheduled airline service.

Evergreen Helicopters of Alaska
1936 Merrill Field Drive
Anchorage, AK 99501
Contact: Joy Journeay, marketing mgr.
Phone: (907) 257-1519
Fax: (907) 279-6816
Email: joy@evergreenak.com
Contact: Greg Thies, director of marketing
Phone: (907) 257-1504
Email: g.thies@evergreenak.com
Nome office: (907) 443-5334
Airlines office: (907) 257-1500
Logistics: (907) 243-8677
Website: evergreenaviation.com
Evergreen's diverse fleet has provided award-winning safety to Alaskans since 1960 in petroleum exploration & production, firefighting, forestry, construction, search & rescue, cargo transport, and utility transmission.

Industrial Gases

Colville
Pouch 340012
Prudhoe Bay, AK 99734
Contact: John Daly, Kevin Cilk
Phone: (907) 659-3197
Fax: (907) 659-3190
Email: prudhoe1@aol.com
Diesel, gasoline, jet fuel, aviation gasoline in bulk and small quantity deliveries, electronic card-lock fleet management, solid waste and recycling, industrial gases and solid waste. Tesoro fuel station.

Industrial Parts & Supply

Brooks Range Supply
Pouch 340008
1 Old Spine Road
Prudhoe Bay, AK 99734
Contact: Mike Kunkel/Craig Welch, general managers
Phone: (907) 659-2550
Toll Free: (866) 659-2550
Fax: (907) 659-2650
Email: brooks@astacalaska.com
Your source on the Slope for safety supplies, welding supplies, automotive and truck parts, hardware, tools, steel, building materials, glass, propane, hydraulic hoses and fittings, paint and chemicals. Napa and True Value Hardware distribution.

Unique Machine
5839 Old Seward Hwy
Anchorage, AK 99518
Contact: Pat Hanley, COO
Phone: (907) 563-3012
Fax: (907) 562-1376
Email: office@uniquemachineinc.com
Website: www.uniquemachineinc.com
Connections; API 5CT, API 7B, Grant Prideco H-Series, Hydril, Hunting, Atlas Bradford, NS Technology Co, Inc., Vallourec and Vam PTS proprietary connections.

U.S. Bearings & Drives
611 E. International Airport Rd.
Anchorage, AK 99518
Contact: Dena Kelley, operations mgr.
Phone: 563-3000
Fax: 563-1003
Email: dkelley@bearings.com
Web site: www.bearings.com
U.S. Bearings & Drives, formerly BESCO has been providing bearings and drive components to our Alaskan customers since 1952. We offer quality components and experienced personnel.

Inspection Services

Engineered Fire & Safety
3138 Commercial Dr.
Anchorage, AK 99501
Contact: Don Maupin, gen. mgr.
Phone: (907) 274-7973 ext. 123
Fax: (907) 274-6265
Email d.maupin@efs-fire.com
Web site: www.efs-fire.com
An industry leader in the design, integration and testing of safety solutions for high value risks. UL system certifications and panel fabrication.

Kakivik Asset Management
5401 Fairbanks St., Ste. 3
Anchorage, AK 99518
Phone: (907) 770-9400
Fax: (907) 770-9450
Contact: Mark Hylen, president/CEO
Email: mhylen@kakivik.com
Web site: www.kakivik.com
Fairbanks Office
Phone: (907) 451-4898
Fax: (907) 451-4897
Valdez Office
Phone: (907) 831-1390
Offering all elements of nondestructive testing, inspection services, quality control and asset management.

Udelhoven Oilfield System Services
Anchorage office:
184 E. 53rd Ave.

Anchorage, AK 99518
Phone: (907) 344-1577
Fax: (907) 522-2541
Nikiski office:
P.O. Box 8349
Nikiski, AK 99635
Phone: (907) 776-5185
Fax: (907) 776-8105
Prudhoe office:
Pouch 340103
Prudhoe Bay, AK 99734
Phone: (907) 659-8093
Fax: (907) 659-8489
Serving Alaska for more than 25 years.

Instrumentation Systems

Arctic Controls
1120 E. 5th Ave.
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, Inc. has been highly successful as manufacturer representatives for the state of Alaska in the Process Control and Instrumentation field. Selling equipment to the oil and gas markets, mining and water wastewater/municipal markets.

Epoch Well Services
5801 Silverado Way
Anchorage, AK 99518
Contact: James R. Carson, AK div. mgr.
Phone: (907) 561-2465
Fax: (907) 561-2474
Email: jcarson@nabors.com
RIGWATCH is a complete digital drilling instrumentation system that monitors all drill floor and mud system parameters. Critical data is displayed and archieved on workstations located at key points on the rig.

Quadco
6116 Nielson Way
Anchorage, AK 99518
Contact: David Baggett, vp, AK mgr.
Phone: (907) 563-8999
Fax: (907) 563-8985
Email: dbaggett@quadcoinc.com
Other offices: Farmington NM, Denver CO, Casper WY
Quadco maintains a fleet of oil field instrumentation, solids control and other equipment for oilfield and industrial needs. We represent Varco Oil Tools, MD Totco, Texas Oil Tools, SPM, Derrick Equipment and various other manufacturers. 24 hours on call

Laboratory Services

Kakivik Asset Management
5401 Fairbanks St., Ste. 3
Anchorage, AK 99518
Phone: (907) 770-9400
Fax: (907) 770-9450
Contact: Mark Hylen, president/CEO
Email: mhylen@kakivik.com
Web site: www.kakivik.com
Fairbanks Office
Phone: (907) 451-4898
Fax: (907) 451-4897
Valdez Office
Phone: (907) 831-1390
Offering all elements of nondestructive testing, inspection services, quality control and asset management.

Legal Services

Perkins Coie
1029 W. 3rd Ave., Ste. 300
Anchorage, AK 99501
Contact: Eric Fjelstad, attorney
Email: Efjelstad@perkinscoie.com
Contact: Teresa Berwick, attorney
Email: Tberwick@perkinscoie.com
Phone: (907) 279-8561
Fax: (907) 276-3108
Other Offices:
Beijing, Bellevue, Boise, Chicago, Denver, Hong Kong,
Los Angeles, Menlo Park, Olympia, Portland, San Francisco, Seattle, Washington D.C.
Website: www.perkinscoie.com
Perkins Coie law firm handles oil spill planning, air emissions, NPDES permits, hazardous waste, CERCLA, wetlands permits, NEPA, and other environmental and natural resources issues.

COURTESY OF ASRC ENERGY

ASRC Northstar off-shore pipeline operations begin on the floating Beaufort Sea ice, with the pipe being strung out and the welding shacks put in place by sidebooms.

Lodging

Hilton Anchorage Hotel
500 West Third Ave.
Anchorage, AK 99501
Contact: Karen Boshell
Phone: (907) 272-7411
Phone: 1-800-445-8667
Fax: (907) 265-7042
Web site: www.anchorage.hilton.com
At the Hilton, guests discover unexpected luxury. We are just steps away from shopping, day tours, fishing and the convention center. The Hilton's 600 guest rooms and suites, three restaurants, indoor pool, and native art collection will make your stay complete.

Millennium Hotel
4800 Spenard Rd.
Anchorage, AK 99517
Contact: Raegan Kelliher
Phone: (907) 243-2300
Phone: (800) 544-0553
Fax: (907) 243-8815
Email: anchorage@mhrmail.com
Web site:
www.millenniumhotels.com/anchorage
The Millennium Alaskan Hotel Anchorage is located just one mile from Anchorage International Airport and ten minutes from downtown. The Millennium is surrounded by the splendor of the great Alaskan outdoors. The Millennium is ideally situated for business and leisure travelers alike.

Logistics

Alaska Railroad Corp.
P.O. Box 107500
Anchorage, AK 99510
Contact: Katie Bender, Marketing and Logistics Technician
Phone: (907) 265-2485
Fax: (907) 265-2597
Email: benderk@akrr.com
The Alaska Railroad Corporation offers real estate, passenger and freight services – including complete services to move your freight between Alaska, the Lower 48 and Canada.

Carlile Transportation Systems
1800 E. 1st Ave.
Anchorage, AK 99501
Contact: Linda Leary
Ph: (907) 267-7797
Fax: (907) 276-6786
Email: lleary@carlilekw.com
Other Offices: Fairbanks, Prudhoe Bay, Kenai, Seward, Federal Way, WA, Houston, TX, Edomonton, ALTA
Alaska owned and operated, full service, multi-modal, transportation and logistics company.

Crowley Alaska
2525 C St., Ste. 303
Anchorage, AK 99503
Contact: Craig Tornga
Phone: (907) 278-4978
Fax: (907) 257-2828
Email: cms.@crowley.com
Complete materials supply services to remote locations. Marine transport throughout Alaska. Oil field services including heavy hauling with all-terrain vehicles on North Slope.

Evergreen Helicopters of Alaska
1936 Merrill Field Drive
Anchorage, AK 99501
Contact: Joy Journeay, marketing mgr.
Phone: (907) 257-1519
Fax: (907) 279-6816
Email: joy@evergreenak.com
Contact: Greg Thies, director of marketing
Phone: (907) 257-1504
Email: g.thies@evergreenak.com
Nome office: (907) 443-5334
Airlines office: (907) 257-1500
Logistics: (907) 243-8677
Website: evergreenaviation.com
Evergreen's diverse fleet has provided award-winning safety to Alaskans since 1960 in petroleum exploration & production, firefighting, forestry, construction, search & rescue, cargo transport, and utility transmission.

The Fairweather Companies
2000 E. 88th Ave.
Anchorage, AK 99507
Contact: Bill Penrose
Phone: (907) 258-3446
Fax: (907) 279-5740
Website: www.fairweather.com
The Fairweather Companies provide project management, engineering, drilling, permitting, logistics, and operational services to the exploration and production sectors of the petroleum industry.

Lynden
Alaska Marine Lines
Alaska Railbelt Marine
Alaska West Express
Lynden Air Cargo
Lynden Air Freight
Lynden International
Lynden Logistics
Lynden Transport
6441 S. Airpark Pl.
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
5631 Silverado Way, Unit G
Anchorage, AK 99518
Contact: Don Powell
Phone: (907) 248-8808
Fax: (907) 248-8878
Email: Sales1@mrosalesinc.com
Web site: www.mrosalesinc.com
Other offices:
Kenai: Al Hull (907) 335-2782
Prudhoe Bay: Joe Bob Bruster (907) 659-2868
We provide Professional Procurement Service for hard-to-find supplies, parts and equipment. Regardless of your location, you will receive service that is guaranteed to meet your requirements. From Anchorage to Siberia, from shipping to communications, you receive service from the experts that have 'Been There, Done That'

Northern Air Cargo
3900 W. International Airport Rd.
Anchorage, AK 99502
Contact: Nick Karnos, acct. mgr.
Anch./Prudhoe Bay
Phone: (907) 249-5161
Fax: (907) 249-5194
Email: nkarnos@nac.aero
Web site: www.nac.aero
Serving the aviation needs of rural Alaska for almost 50 years, NAC is the states largest all cargo carrier moving nearly 100 million pounds of cargo on scheduled flights to 17 of Alaska's busiest airports. NAC's fleet of DC-6, B-727, and ATR-42 aircraft are available for charters to remote sites and flag stops to 44 additional communities.

Northern Transportation
310 K St., Ste. 200
Anchorage, AK 99501
42003 McKenzie Hwy.
Hay River, NWT X0E0R9
Contact: John Marshall
Phone: (867) 874-5167
Fax: (867) 874-5179
Email: jmarshall@ntcl.com
Web site: www.ntcl.com
Marine transportation along the McKenzie River to the Beaufort Sea and Alaska's North Slope.

Northwestern Arctic Air
6231 S. Airpark Pl.
Anchorage, AK 99502
Contact: Judy McClellan, office mgr.
Phone: (907) 245-4566
Fax: (907) 245-4567
Email: pugslie@pobox.alaska.net
Web site: www.NWArcticAirAK.com
On-demand, worldwide, air charter

service, Russia Far-East experience, medical transports, express package delivery, secure convenient, cost-effective, 24/7. Member Medallion Foundation.

Panalpina
4305 W. International Airport Rd.
Anchorage, AK 99502
Contact: John Hodel, branch mgr.
Phone: (907) 245-8008
Fax: (907) 245-8018
Email: john.hodel@panalpina.com
Web site: www.panalpina.com
Other offices:
Houston: (281) 446-0600
Calgary: (403) 291-1137
International and domestic freight forwarding and logistics services. Integrated solutions for supply chain management. Specialists in oil and energy projects.

Span-Alaska Consolidators
8130 S. 216th St.
Kent, WA 98032
Contact: Tom Landry, executive v. p.
Phone: (800) 257-7726
Phone: (907) 349-3606 (Anchorage)
Fax: (253) 395-7986
Email: toml@spanalaska.com
Website: www.spanalaska.com
Alaskan freight consolidator/forwarder serving all of Alaska with timely and friendly service. Inbound service from the Lower 48 to Alaska. "Promises Made, Promises Delivered."

Umiat Commercial
2700 S. Cushman St.
Fairbanks, AK 99701
Contact: Mike Tolbert
Phone: (907) 452-6631
Fax: (907) 451-8632
Email: mike@taigaventures.com
UCC provides lodging and fuel sales at Umiat located on the Colville River. We are open 24 hours a day everyday of the year.

Machining

Unique Machine
5839 Old Seward Hwy
Anchorage, AK 99518
Contact: Pat Hanley, COO
Phone: (907) 563-3012
Fax: (907) 562-1376
Email: office@uniquemachineinc.com
Web site: www.uniquemachineinc.com
The design, development, manufacture and distribution of oilfield, construction, mining, fishing, and government parts to industry quality standards.

Maintenance

Alaska Tent & Tarp
529 Front St.
Fairbanks, AK 99701
Contact: Jim Haselberger
Phone: (907) 456-6328
Phone: (800) 478-8368
Fax: (907) 452-5260
Email: aktent@ptialaska.net
We are a commercial and industrial fabric business. We make covers.

Arctic Controls
1120 E. 5th Ave.
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, Inc. has been highly successful as manufacturer representatives for the state of Alaska in the Process Control and Instrumentation field. Selling equipment to the oil and gas markets, mining and water wastewater/municipal markets.

ASRC Energy Services – Operations and Maintenance
3900 C St.
Anchorage, AK 99503
Contact: Mark Nelson, exec. vp
Phone: (907) 339-6200
Fax: (907) 339-6212
Email: mark.nelson@asrcenergy.com
Web site: www.asrcenergy.com
Oil and gas services, industrial construction, operations and maintenance, module fabrication and assembly, project management and non-destructive testing.


COURTESY OF AEROMED

Since its creation Aeromed has expanded into a major operation handling about 550 missions per year in the Yukon Kuskokwim Delta and about 950 missions per year to and from Anchorage. See the company profile on page B2.

Engineered Fire & Safety
3138 Commercial Dr.
Anchorage, AK 99501
Contact: Don Maupin, gen. mgr.
Phone: (907) 274-7973 ext. 123
Fax: (907) 274-6265
Email d.maupin@efs-fire.com
Web site: www.efs-fire.com
An industry leader in the design, integration and testing of safety solutions for high value risks. UL system certifications and panel fabrication.

MRO Sales
5631 Silverado Way, Unit G
Anchorage, AK 99518
Contact: Don Powell
Phone: (907) 248-8808
Fax: (907) 248-8878
Email: Sales1@mrosalesinc.com
Web site: www.mrosalesinc.com
Other offices:
Kenai: Al Hull (907) 335-2782
We are a stocking distributor for top-of-the-line waste oil heaters (Reznor), waste water flocculants (Waterclear), environmentally friendly solvents for your parts washer (PT Technology), corrosion and erosion repair and maintenance polymers (Belzona), Vapor phase (VpCI™) and Migrating Corrosion Inhibitors (MCI) (Cortec) and valve lubricants and sealants (Chemola).

Management Consultant

Hawk Consultants
200 W. 34th Ave., Ste. 809
Anchorage, AK 99503
Contact: Maynard Tapp, president
Phone: (907) 278-1877
Fax: (907) 278-1889
Email: info@hawkpros.com
Providing people and resources to the oil, gas, power, telecommunication and public works industries. Services include strategic planning, full service project management team consulting/outsourcing, supplemental professionals, professionals, management consulting services.

Maps

AeroMap U.S.
2014 Merrill Field Dr.
Anchorage, AK 99501
Contact: Holly Holmes, Marketing
Phone: (907) 272-4495
Fax: (907) 274-3265
Email: hholmes@aeromap.com
Web site: www.aeromap.com
AeroMap provides geospatial information about the earth utilizing land, airborne and satellite sensors. We define its topography, measure its features, and chronicle its condition.

Mapmakers Alaska
259 S. Alaska St.
Palmer, AK 99645
Contact: Brit Lively, manager
Phone: (907) 745-3398
Fax: (907) 745-6733
Maps for oil and gas industry and custom map work

Marine Services & Construction

American Marine Corp.
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
American Marine Corp. provides full service marine construction and diving services throughout Alaska and the Pacific Basin.

Offshore Divers
5400 Eielson St.
Anchorage, AK 99518
Contact: Don Ingraham, owner/mgr.
Contact: Leif Simcox, owner/oper. mgr.
Phone: (907) 563-9060
Fax: (907) 563-9061
Email: don@offshoredivers.com
Web site: http//www.offshoredivers.com
Offshore Divers is an Alaska owned diving contractor specializing in sub-sea oilfield work on mooring systems, pipelines, platforms and docks in Cook Inlet, on the North Slope and in Valdez.

Peak Oilfield Service
2525 C St., Ste. 201
Anchorage, AK 99503
Contact: Bill Stamps, business development/ex. affairs
Phone: (907) 263-7000
Fax: (907) 263-7070
Email: billstamps@peakalaska.com
Web site: www.peakalaska.com
Alaska based general contractors.

Storm Chasers Marine Services
P.O. Box 757
Seward, AK 99664
Contact: Mica Van Buskirk
Phone: (907) 224-3536
Fax: (907) 224-6080
Email: sci@seward.net
Providing quality marine services in Alaska for over 15 years. Commercial diving, underwater welding, underwater inspection with video, vessel repair, marine construction and marine salvage services.

Mat Systems

Alaska Dreams
522 Goldstreak Rd.
Fairbanks, AK 99712
Contact: M. Huser, president
Phone: (907) 455-7712
Fax: (907) 455-7713
Email: AlaskaDreams@att.net
Custom fabrication of timber or timber with steel combination heavy-duty equipment or road mats, prefabricated retaining walls, containment enclosures or helicopter landing platforms.

Carolina Mat Co.
P.O. Box 339
Plymouth, NC 27962
Contact: Susan Harrison, owner
Phone: (252) 793-4045
Fax: (252) 793-5187
Email: carolinamat@earthlink.net
Website: www.carolinamat.com
Company established in 1985. Manufacture 3-ply patented, bolted, portable, reusable, solid oak construction mats. Guaranteed to hold up to 50 tons, the mats are interlocking and non-interlocking, countersunk or non-countersunk.

Mechanical & Electrical Inspection

Udelhoven Oilfield System Services
Anchorage office:
184 E. 53rd Ave.
Anchorage, AK 99518
Phone: (907) 344-1577
Fax: (907) 522-2541
Nikiski office:
P.O. Box 8349
Nikiski, AK 99635
Phone: (907) 776-5185
Fax: (907) 776-8105
Prudhoe office:
Pouch 340103
Prudhoe Bay, AK 99734
Phone: (907) 659-8093
Fax: (907) 659-8489
Serving Alaska for more than 25 years.

Meetings & Conventions

Hilton Anchorage Hotel
500 West Third Ave.
Anchorage, AK 99501
Contact: Karen Boshell
Phone: (907) 272-7411
Phone: 1-800-445-8667
Fax: (907) 265-7042
Web site: www.anchorage.hilton.com
At the Hilton, guests discover unexpected luxury. We are just steps away from shopping, day tours, fishing and the convention center. The Hilton's 600 guest rooms and suites, three restaurants, indoor pool, and native art collection will make your stay complete.

Millennium Hotel
4800 Spenard Rd.
Anchorage, AK 99517
Contact: Raegan Kelliher
Phone: (907) 243-2300
Phone: (800) 544-0553
Fax: (907) 243-8815
Email: anchorage@mhrmail.com
Web site:
www.millenniumhotels.com/anchorage
The Millennium Alaskan Hotel Anchorage is located just one mile from Anchorage International Airport and ten minutes from downtown. The Millennium is surrounded by the splendor of the great Alaskan outdoors. The Millennium is ideally situated for business and leisure travelers alike.

Metal Distributors

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 S. 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.

Mining

Usibelli Coal Mine
100 Cushman St., Ste. 210
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.

Movers/Relocation

Alaska Terminals
400 W 70th Ave., Ste.3
Anchorage, AK 99518
Contact: Calista Wood
Phone: (907) 349-6657
Fax: (907) 349-2045
Email: akbestmove@akterminals.com
Web site: www.akterminals.com
Other Offices:
Mitchell Moving & Storage, Seattle
Glacier State Moving & Storage, Fairbanks
Alaska Terminals provides full service household goods relocation services to, from, and within Alaska. International, and local residential and office moves; heated, and secured storage.

Capital Office Systems
1120 E, 35th Ave.
Anchorage, AK 99508
Contact: Leslye Langla, managing direct.
Phone: (907) 777-1501
Fax: (907) 777-1515
Email: llangla@capital-office.com
Asset management, systems furniture, project coordination, space planning, systems delivery/installation, furniture refurbishing, and relocation/remodel services. Authorized Steelcase dealer for Alaska.

Mud & Mudlogging

Epoch Well Services
5801 Silverado Way
Anchorage, AK 99518
Contact: James R. Carson, AK div. mgr.
Phone: (907) 561-2465
Fax: (907) 561-2474
Email: jcarson@nabors.com
With over 250 wells logged since 1989, Epoch is the leading provider of advanced mudlogging services in Alaska. Our DML 2000 software assimilates a comprehensive database of geological and drilling information with presentations available in a variety of hardcopy and digital formats.

Office Furniture

Capital Office Systems
1120 E, 35th Ave.
Anchorage, AK 99508
Contact: Leslye Langla, managing direct.
Phone: (907) 777-1501
Fax: (907) 777-1515
Email: llangla@capital-office.com
Asset management, systems furniture, project coordination, space planning, systems delivery/installation, furniture refurbishing, and relocation/remodel services. Authorized Steelcase dealer for Alaska.

Oilfield Service & Rig Up

Weaver Brothers
14223 Kenai Spur Hwy.
Kenai, AK 99611
Contact: Glen Dye, terminal mgr.
Phone: (907) 283-7975
Fax: (907) 283-3677
Email: glend@wbialaska.com
Other Offices:
Anchorage, Alaska
Fairbanks, Alaska
Trucking company specializing in oil field winch truck services. Bed tandems & loaders plus rig moving capabilities. Petroleum and chemical trailers, lowboys, bulk trailers, vans and flats.

On-site Medical Services

Kuukpik Arctic Catering
5761 Silverado Way, Ste P
Anchorage, AK 99518
Contact: Rick MacMillan
Phone: (907) 562-5588
Fax: (907) 562-5898
Email: rickkac@aol.com

Well Safe Inc.
209 E. 51st Ave.
Anchorage, AK 99503
Contact: Ken Carroll, district mgr.
Phone: (907) 743-9871
Fax: (907) 743-9872
Email: kcarroll@wellsafe.com
Web site: www.wellsafe.com
A full service safety company specializing in remote medical support, expeditors, confined space rescue teams, H2S and safety consultants, OSHA training and rental/sales of gas detection and breathing air systems.

Photography

AeroMap U.S.
2014 Merrill Field Dr.
Anchorage, AK 99501
Contact: Holly Holmes, Marketing
Phone: (907) 272-4495
Fax: (907) 274-3265
Email: hholmes@aeromap.com
Web site: www.aeromap.com
AeroMap provides geospatial information about the earth utilizing land, airborne and satellite sensors. We define its topography, measure its features, and chronicle its condition.

Judy Patrick Photography
430 W. 7th Ave., Ste. 220
Anchorage, AK 99501
Contact: Judy Patrick
Phone: (907) 258-4704
Fax: (907) 258-4706
Email: jpphoto@mtaonline.net
Web site: JudyPatrickPhotography.com
Creative images for the resource development industry.

Pipe & Fittings

Petroleum Equipment & Services
5631 Silverado Way, Ste G
Anchorage, AK 99518
Contact: Kevin Durling/Donald Parker
Phone: (907) 248-0066
Fax: (907) 248-4429
Email: sales@pesiak.com
Web site: www.pesiak.com
P.E.S.I. provides both conventional and specialty products and services for the Alaska oil industry. Regardless of your location, you will receive products and service that is guaranteed to meet your requirements.

Pipeline Maintenance

American Marine Corp.
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
American Marine Corp. provides full service marine construction and diving services throughout Alaska and the Pacific Basin.

ASRC Energy Services – Pipeline, Power & Communications
3900 C St.,
Anchorage, AK 99503
Contact: Wade Blasingame
Phone: (907) 339-6400
Fax: (907) 339-6444
Email:
wade.blasingame@asrcenergy.com
Web site: www.asrcenergy.com
Pipeline construction and maintenance, fiber optic cable installation.

Offshore Divers
5400 Eielson St.
Anchorage, AK 99518
Contact: Don Ingraham, owner/mgr.
Contact: Leif Simcox, owner/oper. mgr.
Phone: (907) 563-9060
Fax: (907) 563-9061
Email: don@offshoredivers.com
Web site: http//www.offshoredivers.com
Offshore Divers is an Alaska owned diving contractor specializing in sub-sea oilfield work on mooring systems, pipelines, platforms and docks in Cook Inlet, on the North Slope and in Valdez.

Peak Oilfield Service
2525 C St., Ste. 201
Anchorage, AK 99503
Contact: Bill Stamps, business development/ex. affairs
Phone: (907) 263-7000
Fax: (907) 263-7070
Email: billstamps@peakalaska.com
Web site: www.peakalaska.com
Alaska based general contractors.

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.

Plumbing

Udelhoven Oilfield System Services
Anchorage office:
184 E. 53rd Ave.
Anchorage, AK 99518
Phone: (907) 344-1577
Fax: (907) 522-2541
Nikiski office:
P.O. Box 8349
Nikiski, AK 99635
Phone: (907) 776-5185
Fax: (907) 776-8105
Prudhoe office:
Pouch 340103
Prudhoe Bay, AK 99734
Phone: (907) 659-8093
Fax: (907) 659-8489
Serving Alaska for more than 25 years.

Process Equipment

Hanover Canada
500, 101-6 Ave. SW
Calgary, AB, T2P 3P4 Canada
Contact: Rod Saville, Country Mgr. Canada
Phone: (403) 261-6801
Fax: (403) 266-1066
Email: info@hanover-co.com
Web site: www.hanover-canada.com
Hanover Canada is the leading provider of natural gas compression services and equipment in Canada. We maintain an 85,000 horsepower rental compression fleet in Canada and over 3.6 million horsepower rental fleet worldwide. Hanover custom designs production equipment in accordance with customer's specifications using strict internal engineering standards. We have the capability to provide process, mechanical and instrument design engineering for any production equipment project worldwide.

Natco Group
P.O. Box 850, Stn. T
Calgary, Alberta T2H2H3
Contact: Kevin Baird, bus. dev. mgr.
Phone: (403) 203-2103
Fax: (403) 236-0488
Email: kbaird@natco-ca.com
Web site: www.natco-ca.com
Natco Group engineers, designs and manufactures process, wellhead and water treatment equipment and systems used in the production of oil and gas worldwide.

Procurement Services

Alaska Anvil
509 W. 3rd Ave.
Anchorage, AK 99501–2237
Contact: Frank Weiss
Phone: (907) 276-2747
Fax: (907) 279-4088
Web site: anvilcorp.com
Other office: Kenai
50720 Kenai Spur Hwy, Mile 24.5
Kenai, AK 99611
Phone: (907) 776-5870
Fax: (907) 770-5871
Multi-discipline engineering and design services including construction management for petro-chemical and heavy industrial client projects.

MRO Sales
5631 Silverado Way, Unit G
Anchorage, AK 99518
Contact: Don Powell
Phone: (907) 248-8808
Fax: (907) 248-8878
Email: Sales1@mrosalesinc.com
Web site: www.mrosalesinc.com
Other offices:
Kenai: Al Hull (907) 335-2782
We provide Professional Procurement Service for hard-to-find supplies, parts and equipment. Regardless of your location, you will receive service that is guaranteed to meet your requirements. From Anchorage to Siberia, from shipping to communications, you receive service from the experts that have 'Been There, Done That'

NANA/Colt Engineering
700 G Street, 5th floor
Anchorage, AK 99501
Phone: (907) 273-3900
Fax: (907) 273-3990
Contact: John Minier
NANA/Colt offers project management, engineering, design, construction management, and procurement services to the oil industry.

Production Equipment

Oilfield Improvements
1902 North Yellowood Ave.
Broken Arrow, OK 74145
Contact: Hughes Coston SR
Phone: (918) 250-5584
Phone: (800) 537-9327
Fax: (918) 250-4666
Email: info@rodguides.com
Website: www.rodguides.com
Sucker rod guides – The Ultra Flow field installed guide, The Wheeled Rod Guide

Real Estate

Alaska Railroad Corp.
P.O. Box 107500
Anchorage, AK 99510
Contact: Katie Bender, Marketing and Logistics Technician
Phone: (907) 265-2485
Fax: (907) 265-2597
Email: benderk@akrr.com
The Alaska Railroad Corporation offers real estate, passenger and freight services – including complete services to move your freight between Alaska, the

Lower 48 and Canada.

Prudhoe Bay Shop & Storage
Deadhorse Airport
Deadhorse, AK 99734
Contact: J. Harper Gaston, president
P.O. Box 670
Greenville, GA 30222
Phone: (706) 672-0999
Fax: (706) 672-1188
Email: jcrlcr@numail.org
Space designed for oilfield services. Located one-half mile north of Deadhorse airport. 800 sf.–1,200 sf. individual or combined units. Rent includes heat, snow removal, maintenance and repairs.

Recycling Waste Management

Colville
Pouch 340012
Prudhoe Bay, AK 99734
Contact: John Daly, Kevin Cilk
Phone: (907) 659-3197
Fax: (907) 659-3190
Email: prudhoe1@aol.com
Diesel, gasoline, jet fuel, aviation gasoline in bulk and small quantity deliveries, electronic card-lock fleet management, solid waste and recycling, industrial gases and solid waste. Tesoro fuel station.

NEI Fluid Technology
3408 Arctic Blvd.
Anchorage, AK 99503
Contact: Kathryn Russell, president
Phone: (907) 561-4820
Fax: (907) 562-2316
Email: neifluid@ptialaska.net
Suppliers of petrochemical refueling and testing equipment, meters and valve systems for the oil and gas industry and portable measurement for petroleum, chemicals and bulk liquids. We also supply refrigerant recovery and recycling equipment.

Pacific Environmental (PENCO)
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. American Maine svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
PENCO provides environmental response, containment and clean up. Hazardous wastes and contaminated site clean up and remediation. Asbestos and lead abatement. Petroleum vessel services and bulk fuel oil facility and storage tank maintenance, management and operations.

Quadco
6116 Nielson Way
Anchorage, AK 99518
Contact: David Baggett, VP, Alaska manager
Phone: (907) 563-8999
Fax: (907) 563-8985
Email: dbaggett@quadcoinc.com
Other offices: Farmington NM, Denver CO, Casper WY
Quadco has supplied services to the Alaska oilfield since 1976. We have trained personnel to help with instrumentation, solids control, pipe handling and Top Drive drilling equipment. 24 hour on call

Reporting Software

Epoch Well Services
5801 Silverado Way
Anchorage, AK 99518
Contact: James R. Carson, AK div. mgr.
Phone: (907) 561-2465
Fax: (907) 561-2474
Email: jcarson@nabors.com
PERC is a Windows based relational database program for morning reports, well planning, drilling, completion and workover reports. RIGREPORT provides contractors with an electronic tour sheet for morning reports and payroll reporting.

Restaurants

Millennium Hotel
4800 Spenard Rd.
Anchorage, AK 99517
Contact: Raegan Kelliher
Phone: (907) 243-2300
Phone: (800) 544-0553
Fax: (907) 243-8815
Email: anchorage@mhrmail.com
Web site:
www.millenniumhotels.com/anchorage
The Millennium Alaskan Hotel Anchorage is located just one mile from Anchorage International Airport and ten minutes from downtown. The Millennium is surrounded by the splendor of the great Alaskan outdoors. The Millennium is ideally situated for business and leisure travelers alike.

Right of Way Maintenance

Carolina Mat Co.
P.O. Box 339
Plymouth, NC 27962
Contact: Susan Harrison, owner
Phone: (252) 793-4045
Fax: (252) 793-5187
Email: carolinamat@earthlink.net
Website: www.carolinamat.com
Company established in 1985. Manufacture 3-ply patented, bolted, portable, reusable, solid oak construction mats. Guaranteed to hold up to 50 tons, the mats are interlocking and non-interlocking, countersunk or non-countersunk.

Cruz Construction
HC04 Box 9323
Palmer, AK 99645
Contact: Dave or Dana Cruz
Phone: (907) 746-3144
Fax: (907) 746-5557
Email: cruzco@alaska.net
General contractor specializing in heavy civil construction, horizontal direction drilling for utilities. Ice road and ice bridge construction throughout Alaska in support of resource development.

Safety Equipment & Supplies

Arctic Fire & Safety
702 30th Ave.
Fairbanks, AK 99701
Contact: Bobby, Shane, Gigi
Phone: (907) 378-2116
Fax: (907) 452-7876
Email: arcfire@yahoo.com
Your Alaskan owned safety specialist since 1975. Barricades, barrels, all PPE, gas detection marine and FAA related, extinguisher services, fit testing, signs, we stock heavy.

Brooks Range Supply
Pouch 340008
1 Old Spine Road
Prudhoe Bay, AK 99734
Contact: Mike Kunkel/Craig Welch, general managers
Phone: (907) 659-2550
Toll Free: (866) 659-2550
Fax: (907) 659-2650
Email: brooks@astacalaska.com
Your source on the Slope for safety supplies, welding supplies, automotive and truck parts, hardware, tools, steel, building materials, glass, propane, hydraulic hoses and fittings, paint and chemicals. Napa and True Value Hardware distribution.

Jackovich Industrial & Construction Supply
Fairbanks: 1600 Wells St.
Attn: Buz Jackovich
Phone: (907) 456-4414
Fax: (907) 452-4846
Anchorage: 1716 Post Road
Attn: Steve Slone
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.

MEDC International
5829 West Sam Houston Pkwy, North, Ste.1005
Houston, TX 77041
Contact: Phil Hausman, U.S. sales mgr.
Phone: (713) 937-9772
Fax: (713) 937-9773
Email: phausman@medcint.com
Other Office: MEDC Ltd. – UK
Website: www.medc.com
MEDC design, manufacture and sell a range of UL/CENELEC approved field devices for fire & gas and communications systems for use in potentially explosive atmospheres.

Unitech of Alaska
2130 E. Dimond Blvd.

Anchorage, AK 99507
Contact: Debbie Hawley
Phone: (907) 349-5142
Phone: (800) 649-5859
Fax: (907) 349-2733
Email: unitech@alaska.com
Email: dhawley@unitechofalaska.com
UOA is Alaska's only 24-hour oil spill remediation, environmental and industrial supply company. Specialty areas include sorbents, geotextile, containment berms, drums and ice melt.

Well Safe Inc.
209 E. 51st Ave.
Anchorage, AK 99503
Contact: Ken Carroll, district mgr.
Phone: (907) 743-9871
Fax: (907) 743-9872
Email: kcarroll@wellsafe.com
Web site: www.wellsafe.com
A full service safety company specializing in remote medical support, expeditors, confined space rescue teams, H2S and safety consultants, OSHA training and rental/sales of gas detection and breathing air systems.

Security

Kuukpik Arctic Catering
5761 Silverado Way, Ste P
Anchorage, AK 99518
Contact: Rick MacMillan
Phone: (907) 562-5588
Fax: (907) 562-5898
Email: rickkac@aol.com

Seismic & Geophysical

Hunter 3-D
9898 Bissonnet St., Ste. 362
Houston, TX 77036
Contact: Dan Huston, vice president
Phone: (713) 981-4650
Fax: (713) 981-4650
Email: hunter3d@wt.net
Web site: www.hunter3dinc.com
Hunter 3-D is a geophysical consulting company based in Houston, Texas. We interpret seismic, gravity and magnetic data for projects in Alaska and worldwide.

Kuukpik/Veritas
2000 E. 88th Ave.
Anchorage, AK 99507
Contact: Jeff Hastings
Phone: (907) 276-6037
Fax: (907) 279-5740
Email: Jeff_Hastings@VeritasDGC.com

PGS Onshore
341 W. Tudor Rd., Ste. 206
Anchorage, AK 99503
Contact: Larry Watt, Alaska area mgr.
Phone: (907) 569-4049
Fax: (907) 569-4047
Email: larry.watt@pgsonshore.com
Houston Office
738 Hwy 6 South, Ste 900
Houston, TX 77079
Contact: Gehrig Schultz
Phone: (281) 589-6732
Fax: (281) 589-6685
Email: gehrig.schultz@pgsonshore.com
Geophysical acquisition and processing for the petroleum industry. PGS Onshore provides fully rubber tracked Arctic geophysical crews to acquire the highest density data with the softest environmental footprint on the North Slope.

Shops/Storage Space

Prudhoe Bay Shop & Storage
Deadhorse Airport
Deadhorse, AK 99734
Contact: J. Harper Gaston, president
P.O. Box 670
Greenville, GA 30222
Phone: (706) 672-0999
Fax: (706) 672-1188
Email: jcrlcr@numail.org
Space designed for oilfield services. Located one-half mile north of Deadhorse airport. 800 sf.–1,200 sf. individual or combined units. Rent includes heat, snow removal, maintenance and repairs.

Soil Stabilization

Arctic Foundations
5621 Arctic Blvd.
Anchorage, AK 99518-1667
Contact: Ed Yarmak
Phone: (907) 562-2741
Fax: (907) 562-0153
Email: info@arcticfoundations.com
Web site: 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.

Space Design/Planning

Capital Office Systems
1120 E, 35th Ave.
Anchorage, AK 99508
Contact: Leslye Langla, managing direct.
Phone: (907) 777-1501
Fax: (907) 777-1515
Email: llangla@capital-office.com
Asset management, systems furniture, project coordination, space planning, systems delivery/installation, furniture refurbishing, and relocation/remodel services. Authorized Steelcase dealer for Alaska.

Steel Fabrication

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 S. 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
Rebar fabrication full service with in house estimating and detailing.

Peak Oilfield Service
2525 C St., Ste. 201
Anchorage, AK 99503
Contact: Bill Stamps, business development/ex. affairs
Phone: (907) 263-7000
Fax: (907) 263-7070
Email: billstamps@peakalaska.com
Web site: www.peakalaska.com
Alaska based general contractors.

STEELFAB
2132 Railroad Ave.
Anchorage, AK 99501
Contact: Janet Faulkner, vice president
Phone: (907) 264-2819
Fax: (907) 276-3448
Email: jfaulkner@steelfabak.com
STEELFAB is the largest Alaskan-owned steel service center in the state. It provides pressure vessels, modules, special design items and raw steel products.

Totem Equipment & Supply
2536 Commercial Dr.
Anchorage, AK 99501
Contact: Mike Huston, vp
Phone: (907) 276-2858
Fax: (907) 258-4623
Email: sales@toteminc.com
Web site: www.toteminc.com
Totem Equipment & Supply Inc. locally owned and operated since 1961. Supplies light, medium and heavy equipment. Specializing in temporary and permanent heating solutions.

Udelhoven Oilfield System Services
Anchorage office:
184 E. 53rd Ave.
Anchorage, AK 99518
Phone: (907) 344-1577
Fax: (907) 522-2541
Nikiski office:
P.O. Box 8349
Nikiski, AK 99635
Phone: (907) 776-5185
Fax: (907) 776-8105
Prudhoe office:
Pouch 340103
Prudhoe Bay, AK 99734
Phone: (907) 659-8093
Fax: (907) 659-8489
Serving Alaska for more than 25 years.

Steel Sales

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 S. 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.

Colville
Pouch 340012
Prudhoe Bay, AK 99734
Contact: John Daly
Phone: (907) 659-3197
Fax: (907) 659-3190
Diesel, gasoline, jet fuel, aviation gasoline in bulk and small quantity deliveries, electronic card-lock fleet management, solid waste and recycling, steel, industrial gases and solid waste.

STEELFAB
2132 Railroad Ave.
Anchorage, AK 99501
Contact: Janet Faulkner, vice president
Phone: (907) 264-2819
Fax: (907) 276-3448
Email: jfaulkner@steelfabak.com
STEELFAB is the largest Alaskan-owned steel service center in the state. It provides pressure vessels, modules, special design items and raw steel products.

Surveying & Mapping

AeroMap U.S.
2014 Merrill Field Dr.
Anchorage, AK 99501
Contact: Holly Holmes, Marketing
Phone: (907) 272-4495
Fax: (907) 274-3265
Email: hholmes@aeromap.com
Web site: www.aeromap.com
AeroMap provides geospatial information about the earth utilizing land, airborne and satellite sensors. We define its topography, measure its features, and chronicle its condition.

ASTAC/fm, a division of ASTAC
4300 B St., Ste. 501
Anchorage, AK 99503
Contact: Don Nelson
Phone: (907) 563-3989
Phone: 1-800-478-6409
Fax: (907) 563-1932
Email: don@astac.net
Provides expertise in implementing GIS technology whether it be data conversions or a complete turnkey solution.

Kuukpik-LCMF
139 E. 51st Ave.
Anchorage, AK 99503
Contact: Richard Rearick, architectural mgr.
Contact: Willey Wilhelm, engineering mgr.
Contact: Tony Hoffman, survey mgr.
Phone: (907) 273-1830
Phone: (800) 955-1830
Fax: (907) 273-1831
Email: lcmfanch@alaska.net
Other Offices:
Barrow: (800) 478-8213
Email: ktoovak@lcmf.com
Alpine: (907) 670-4739
Email: alp1035@ppco.com
Statewide contractor project support surveyors; remote site land and hydrographic surveys for government and private; oil and gas development surveying, mapping, and permitting.

Lounsbury and Associates
723 W. 6th Ave.
Anchorage, AK 99501
Contact: Craig L. Savage, president
E-mail: csavage@lounsburyinc.com
Contact: Jim Sawhill, vp
Email: jsawhill@lounsburyinc.com
Phone: (907) 272-5451
Fax: (907) 272-9065
Toll Free: (800) 478-5451
Website: www.lounsburyinc.com
Specializing in surveying for Alaska oil and gas exploration, oilfield development and transportation systems, conventional and GPS surveying, and mapping.

Tank Fabrication

Northern Transportation
310 K St., Ste. 200
Anchorage, AK 99501
42003 McKenzie Hwy.
Hay River, NWT X0E0R9
Contact: John Marshall
Phone: (867) 874-5167
Fax: (867) 874-5179
Email: jmarshall@ntcl.com
Web site: www.ntcl.com
Marine transportation along the McKenzie River to the Beaufort Sea and Alaska's North Slope.

Telephone Equipment & Sales

ASTAC
4300 B St., Ste. 501
Anchorage, AK 99503
Contact: Erin Ealum
Phone: (907) 563-3989
Phone: 1-800-478-6409
Fax: (907) 563-1932
Email: info@astac.net
Providing local and long distance service, Internet, maintenance and training, consultation, installation, engineering, Centrex, custom calling features, digital cross connect service, and digital data service to the North Slope region of Alaska.

Temporary Placement Services

Alaska's People
2600 Cordova St., Ste.211
Anchorage, AK 99503
Contact: Teresa Nelson, director
Phone: (907) 263-7013
Fax: (907) 263-7083
Email: tnelson@citci.com
Web site: www.alaskapeople.com
Employment reference services with an emphasis on qualified Alaska Natives and American Indians.

Chiulista Camp Services/Mayflower Catering
6613 Brayton Dr., Ste. C
Anchorage, AK 99507
Contact: George B. Gardner, pres/gm
Phone: (907) 278-2208
Fax: (907) 677-7261
Email: ggardner@calistacorp.com
The 100 percent Alaska Native owned and operated catering company on the North Slope, catering and housekeeping to your tastes, not ours.

Training

Pacific Rim Institute of Safety & Management (PRISM)
P.O. Box 3670
Kenai, AK 99611
Contact: David C. Burnett, program mgr.
Phone: (907) 283-3054
Fax: (907) 283-1853
Email: PRISM@Alaska.net
Web site: www.AAICorp.com
Providing a full spectrum of compliance based training for workers in the field of health, safety and emergency response, all in one location. Basic rigging, forklift and manlift operations, confined space rescue, hazardous materials, maritime (BST, STCW certified), industrial fire fighting (NFPA 600).

Well Safe Inc.
209 E. 51st Ave.
Anchorage, AK 99503
Contact: Ken Carroll, district mgr.
Phone: (907) 743-9871
Fax: (907) 743-9872
Email: kcarroll@wellsafe.com
Web site: www.wellsafe.com
A full service safety company specializing in remote medical support, expeditors, confined space rescue teams, H2S and safety consultants, OSHA training and rental/sales of gas detection and breathing air systems.

Underwater NDT & Photography

American Marine Corp.
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. svc. group

Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
American Marine Corp. provides full service marine construction and diving services throughout Alaska and the Pacific Basin.

Offshore Divers
5400 Eielson St.
Anchorage, AK 99518
Contact: Don Ingraham, owner/mgr.
Contact: Leif Simcox, owner/oper. mgr.
Phone: (907) 563-9060
Fax: (907) 563-9061
Email: don@offshoredivers.com
Web site: http//www.offshoredivers.com
Offshore Divers is an Alaska owned diving contractor specializing in sub-sea oilfield work on mooring systems, pipelines, platforms and docks in Cook Inlet, on the North Slope and in Valdez.

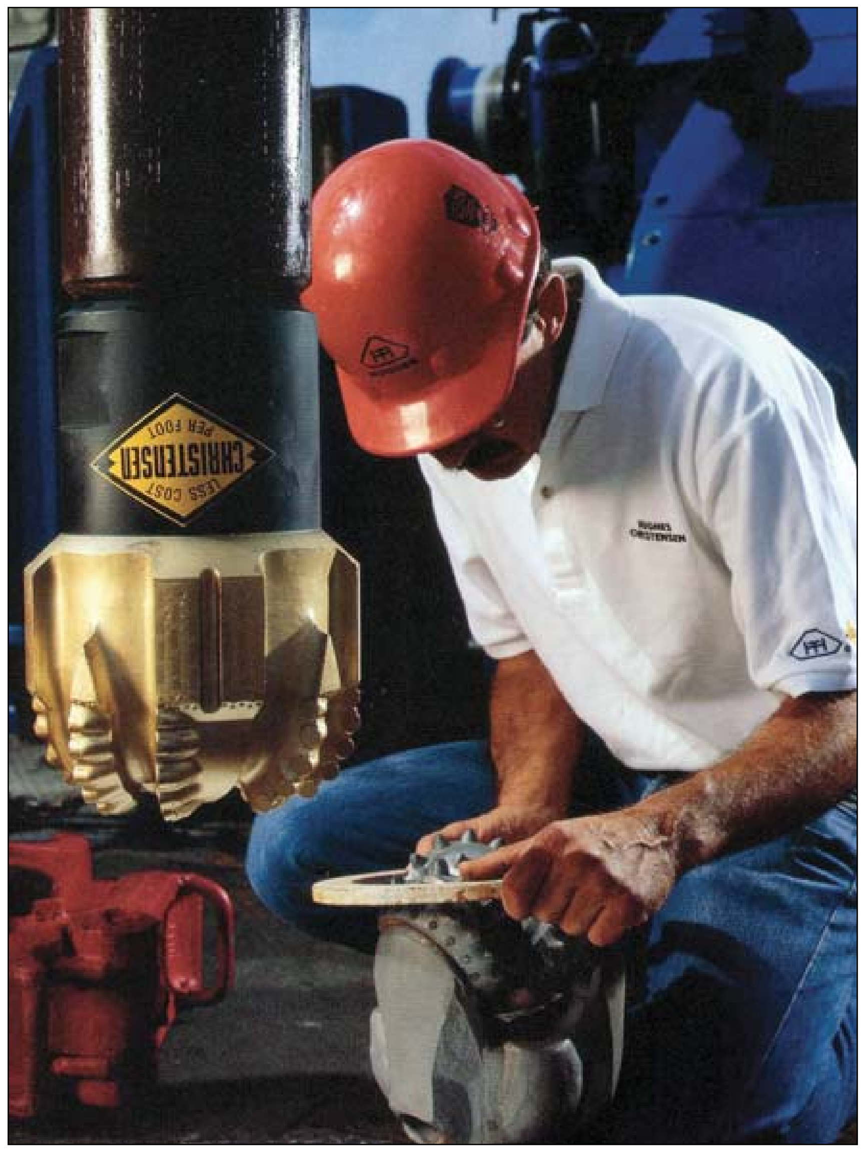
Storm Chasers Marine Services
P.O. Box 757
Seward, AK 99664
Contact: Mica Van Buskirk
Phone: (907) 224-3536
Fax: (907) 224-6080
Email: sci@seward.net
Providing quality marine services in Alaska for over 15 years. Commercial diving, underwater welding, underwater inspection with video, vessel repair, marine construction and marine salvage services.

Underwater Welding

American Marine Corp.
6000 A St.
Anchorage, AK 99518
Contact: Tom Ulrich, reg. mgr. svc. group
Phone: (907) 562-5420
Fax: (907) 562-5426
Email: alaska@amsghq.com
Web site: www.amsghq.com
American Marine Corp. provides full service marine construction and diving services throughout Alaska and the Pacific Basin.

Offshore Divers
5400 Eielson St.
Anchorage, AK 99518
Contact: Don Ingraham, owner/mgr.
Contact: Leif Simcox, owner/oper. mgr.
Phone: (907) 563-9060
Fax: (907) 563-9061
Email: don@offshoredivers.com
Web site: http//www.offshoredivers.com
Offshore Divers is an Alaska owned diving contractor specializing in sub-sea oilfield work on mooring systems, pipelines, platforms and docks in Cook Inlet, on the North Slope and in Valdez.

Storm Chasers Marine Services
P.O. Box 757
Seward, AK 99664
Contact: Mica Van Buskirk
Phone: (907) 224-3536
Fax: (907) 224-6080
Email: sci@seward.net
Providing quality marine services in Alaska for over 15 years. Commercial diving, underwater welding, underwater inspection with video, vessel repair, marine construction and marine salvage services.



COURTESY OF BAKER HUGHES INTEQ

Hughes Christensen's high performance roller cone or fixed cutter bits increase penetration rates, extend time on bottom and improve drilling efficiency. Hughes Christensen is an integral part of the Baker Hughes family of companies. See the company profile on page B11.

Vehicle Repair

Kenworth Alaska
2838 Porcupine Dr.
Anchorage, AK 99501
Contact: Jim Scherieble, branch mgr.
Phone: (907) 279-0602
Phone: (800) 478-0602
Fax: (907) 258-6639
Email: parts@kenworthalaska.com
Email: sales@kenworthalaska.com
Website: www.kenworthalaska.com
Fairbanks office:
3730 Braddock St.
Fairbanks, AK 99701
Contact: Ed Lewis, branch mgr.
Phone: (907) 455-9900
Fax: (907) 479-8295
Kenworth Alaska is a full service truck dealership in two locations – Anchorage and Fairbanks. New and used truck sales, parts and service.

Seekins Ford Lincoln Mercury
1625 Old Steese Hwy.
Fairbanks, AK 99701
Contact: Steven Angel, fleet sales mgr.
Phone: (907) 459-4044
Fax: (907) 450-4007
Email: fleetsales@seekins.com
Web site: www.seekins.com
Ford Lincoln Mercury dealer located in Fairbanks Alaska providing solutions to your transportation needs. Parts and service support in Fairbanks and Prudhoe Bay.

Vehicle Sales/Rental

Seekins Ford Lincoln Mercury
1625 Old Steese Hwy.
Fairbanks, AK 99701
Contact: Steven Angel, fleet sales mgr.
Phone: (907) 459-4044
Fax: (907) 450-4007
Email: fleetsales@seekins.com
Web site: www.seekins.com
Ford Lincoln Mercury dealer located in Fairbanks Alaska providing solutions to your transportation needs. Parts and service support in Fairbanks and Prudhoe Bay.

Welding

Udelhoven Oilfield System Services
Anchorage office:
184 E. 53rd Ave.
Anchorage, AK 99518
Phone: (907) 344-1577
Fax: (907) 522-2541
Nikiski office:
P.O. Box 8349
Nikiski, AK 99635
Phone: (907) 776-5185
Fax: (907) 776-8105
Prudhoe office:
Pouch 340103
Prudhoe Bay, AK 99734
Phone: (907) 659-8093
Fax: (907) 659-8489
Serving Alaska for more than 25 years.

Weld Repairs/Manufacturing

Hanover Canada
500, 101-6 Ave. SW
Calgary, AB, T2P 3P4 Canada
Contact: Rod Saville, Country Mgr. Canada
Phone: (403) 261-6801
Fax: (403) 266-1066
Email: info@hanover-co.com
Web site: www.hanover-canada.com
Hanover Canada is the leading provider of natural gas compression services and equipment in Canada. We maintain an 85,000 horsepower rental compression fleet in Canada and over 3.6 million horsepower rental fleet worldwide. Hanover custom designs production equipment in accordance with customer's specifications using strict internal engineering standards. We have the capability to provide process, mechanical and instrument design engineering for any production equipment project worldwide.

Natco Canada
P.O. Box 850, Stn. T
Calgary, Alberta T2H2H3
Contact: Kevin Baird, bus. dev. mgr.
Phone: (403) 203-2103
Fax: (403) 236-0488
Email: kbaird@natco-ca.com
Web site: www.natco-ca.com
Natco Group engineers, designs and manufactures process, wellhead and water treatment equipment and systems used in the production of oil and gas worldwide.

Peak Oilfield Service
2525 C St., Ste. 201
Anchorage, AK 99503
Contact: Bill Stamps, business development/ex. affairs
Phone: (907) 263-7000
Fax: (907) 263-7070
Email: billstamps@peakalaska.com
Web site: www.peakalaska.com
Alaska based general contractors.

STEELFAB
2132 Railroad Ave.
Anchorage, AK 99501
Contact: Janet Faulkner, vice president
Phone: (907) 264-2819
Fax: (907) 276-3448
Email: jfaulkner@steelfabak.com
STEELFAB is the largest Alaskan-owned steel service center in the state. It provides pressure vessels, modules, special design items and raw steel products.

Unique Machine
5839 Old Seward Hwy
Anchorage, AK 99518
Contact: Pat Hanley, COO
Phone: (907) 563-3012
Fax: (907) 562-1376
Email: office@uniquemachineinc.com
Web site: www.uniquemachineinc.com
The design, development, manufacture and distribution of oilfield construction, mining, fishing and government parts to industry quality standards.

OIL COMPANIES

Operators

ConocoPhillips Alaska
700 G St.
P.O. Box 100360
Anchorage, AK 99510-0360
Contact: Kevin O. Meyers, president & CEO
Phone: (907) 265-6134
Fax: (907) 265-1502

Marathon Oil
3201 C St., Ste 800
Anchorage, AK 99503
Contact: John A. Barnes, regional mgr.
Phone: (907) 561-5311
Fax: (907) 564-6489
Website: www.marathon.com

XTO Energy
810 Houston St., Ste. 2000
Fort Worth, TX 76102
Contact: Vaughn O. Vennerberg, II
Phone: (817) 870-2800
Fax: (817) 870-0379
Other Office: XTO Energy, 52260 Shell Road, Kenai, AK 99611, Doug Marshall, production superintendent
XTO Energy, established in 1986, is engaged in the acquisition and development of quality, long-lived producing oil and gas properties and exploration for oil and gas.

company snapshots

COURTESY OF AEROMED

Aeromed medical crews and flight crews are totally dedicated 24 hours a day, seven days a week.

COURTESY OF BAKER HUGHES

Baker Hughes AutoTrak ™ entering the hole.

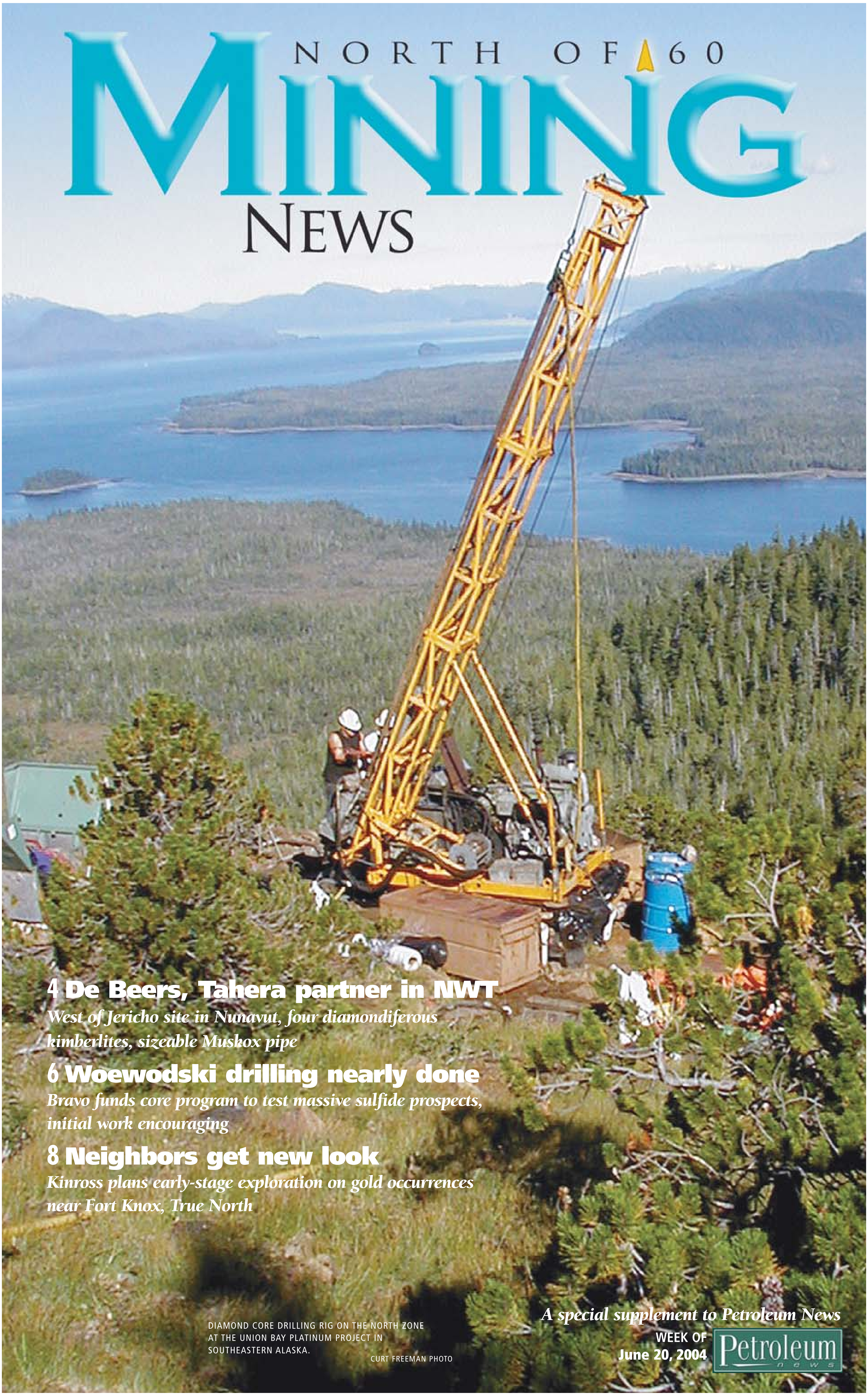
COURTESY OF ASRC ENERGY

ASRC Northstar pipe loading operations in Prudhoe Bay Alaska.

COURTESY OF HANOVER CANADA

Hanover Maloney fabrication facility and staff, Calgary, Alberta, Canada. The fabrication shop has established a reputation worldwide for its skid-mounted dehydration units, sulphur recovery plants and gas treating facilities.

NORTH OF 60 MINING NEWS



4 **De Beers, Tahera partner in NWT**

West of Jericho site in Nunavut, four diamondiferous kimberlites, sizeable Muskox pipe

6 **Woewodski drilling nearly done**

Bravo funds core program to test massive sulfide prospects, initial work encouraging

8 **Neighbors get new look**

Kinross plans early-stage exploration on gold occurrences near Fort Knox, True North

DIAMOND CORE DRILLING RIG ON THE NORTH ZONE AT THE UNION BAY PLATINUM PROJECT IN SOUTHEASTERN ALASKA.

CURT FREEMAN PHOTO

A special supplement to Petroleum News

WEEK OF June 20, 2004

Petroleum news

● FAIRBANKS, ALASKA

Kinross adds equipment, ups spending

Fort Knox owner plans $60M capital budget to remove waste rock for Phase 6 mining to carry mine life into 2010

By PATRICIA LILES

Mining News Editor

PATRICIA LILES

Six new haul trucks, similar to the truck pictured at left, are due to be delivered to Fort Knox in late July or early August. The six Caterpillar 789 haul trucks each provide a 190-ton capacity. The new trucks dwarf the mine's 150-ton trucks, pictured at right.

Work began this spring on a three year, $60 million capital project at the Fort Knox gold mine northeast of Fairbanks, Alaska, a project that will ultimately access 1 million ounces of deeply buried gold, ensuring production at Alaska's largest mine through 2010.

Called Phase 6, the mine expansion entails removing 55 million tons of non-gold bearing rock, or waste rock, in order to access an estimated 1 million ounces of gold already included in the mine's reserve used to estimate the remaining amount of production life. Toronto-based Kinross Gold, which owns the Fort Knox mine, decided earlier this year to proceed with the Phase 6 project. The work was briefly described in the company's 2003 year-end report, and was further detailed in Kinross' first quarter report, released May 10.

"Results from Fort Knox in-pit work confirmed sufficient continuity of the mineralization to justify a major pit wall layback on an assumed gold price of $325 per ounce," the report said. "This major layback is compromised of a three year, approximately $60 million capital expenditure program mostly in the form of stripping to liberate ore to prolong the economic life of the Fort Knox Mine."

When the waste rock is finally removed, at a rate of about 60,000 tons per day, the remaining strip ratio for mining gold-bearing rock is 1.8 to 1, according to Fort Knox General Manager John Wild. Miners will be able to access that gold, starting in 2007, allowing mining to continue through 2009. The final ore stockpiles will be processed in 2010, according to Wild.

New equipment requires more workers

This year, Kinross plans to spend $39 million on capital investments at Fort Knox. Of that, $19 million will go toward purchase or lease of new dirt-moving equipment.

"Twenty million is for the capital investment in Phase 5 and Phase 6," Wild said, in an interview with Mining News on June 1. "We're really pleased to have this budget approved."

Six new haul trucks are due to be delivered to Fort Knox in late July or early August, he said. According to the company's March 11 press release, the six Caterpillar 789 haul trucks each provide a 190-ton capacity. A new loader has been added to the mine fleet, and more loading equipment is being considered. The company purchased a new 27.5 cubic yard shovel in 2003, spending $3.7 million.

Adding new equipment and the increased mining work per day will require more workers, Wild said, adding to the 385 currently working at Fort Knox.

"We're adding new employees already," he said. "We'll be back up to the 424 range toward the end of the year."

The Phase 6 waste rock removal is predominately on the south side of the Fort Knox pit. Some of the stripping work wraps around the pit sides to the east and to the west, Wild said. Plans call for the pit's final size to be roughly 265 acres, measuring 5,200 feet by 2,600 feet, by more than 1,000 feet deep.

Tailings dam lift started

In addition, dirt-moving crews at Fort Knox have also been working to complete a 25-foot lift on the tailings dam impoundment, extending the amount of storage for non-mineralized rock, Wild said. The $5 million spent on the tailings dam lift this year will give Fort Knox another two years of tailings storage at the mine's 2003 milling rate of 14 million tons per year.

"The tailings dam is doing quite well. So far we are definitely on track for completion and on budget," he said.

The lift, which is being constructed using equipment and some personnel from the recently shuttered True North satellite mine, should be complete in about two months, weather permitting, Wild said.

Kinross announced its decision to suspend mining at True North, about 10 miles northwest of Fort Knox, in early March. Plans call for mining to resume at True North sometime in the fourth quarter of 2004, Wild said.

"If we have an opportunity to do it a little earlier, we'll do it," he said.

Lowered production, higher costs in first quarter

Adding ore from True North, combined with mining moving into an area with a higher grade of gold per ton of rock, will improve Fort Knox's production and cash costs, Wild said.

In the first three months of 2004, Fort Knox produced 75,980 ounces of gold, a decrease from the 91,214 ounces produced in the first quarter of 2003. Total cash costs were $290 per ounce, compared to the $260 per ounce posted in the first quarter of 2003.

"Production levels for the first quarter of 2004 were marginally ahead of plan and total cash costs were 6 percent below plan," the company said in the first quarter report. "During the first half of the year, mill feed grades are low due to the mining sequence at Fort Knox and the deferral of True North mining to the second half of 2004."

That will change in the second half of the year, as new equipment begins to help move more waste rock, miners move into a higher-grade area, the tailing dam project is completed and work resumes at True North.

"The grades are typically better, softer, and it blends better through the mill," Wild said. "The net effect is lower operating costs. You'll see our operating costs drop."

Kinross projections call for production to increase from 145,000 ounces expected in the first half of 2004 to 195,000 ounces in the second half. Total cash costs for the first half of the year are expected to average $280 per ounce, decreasing to approximately $176 per ounce in the second half.

The company expects total 2004 production to be 340,000 ounces, with an average cash cost at $220 per ounce of gold. The average grade of gold mined during the first three months of 2004 was 0.91 grams per tonne, compared to 1.11 grams per tonne in the first quarter of 2003. Kinross reported a recovery rate of 81 percent, compared to 83 percent in 2003. Depreciation, depletion and amortization costs dropped to $82 per ounce, compared to $105 in the first quarter of 2003.

Total production costs in the first three months of 2004 were $376 per ounce of gold produced at Fort Knox, compared to $369 per ounce in the first quarter of 2003. ●

INTERIOR ALASKA

AngloGold files drilling permits for ER, Eagle properties near Pogo project

AngloGold (U.S.A.) Exploration filed exploration permits with the Alaska Department of Natural Resources in late May, requesting permission to drill up to 60 core holes this summer on two different properties near the Pogo gold project in Interior Alaska.

The company plans to drill up to 30 holes on the ER project, just west of Pogo, in the upper Goodpaster River drainage. Vancouver, British Columbia-based Rimfire Minerals initially staked some of that property and has optioned its holdings to AngloGold.

> *The company plans to drill up to 30 holes on the ER project, just west of Pogo, in the upper Goodpaster River drainage. Vancouver, British Columbia-based Rimfire Minerals initially staked some of that property and has optioned its holdings to AngloGold.*

The two companies staked additional ground in the area in recent months, increasing the land package to a 16.5-square mile claim block, according to Rimfire.

Helicopter-supported diamond core drilling is tentatively scheduled to start at ER between June 15 and July 1, according to AngloGold's exploration permit application. The actual number of drill holes depends on the initial results, according to a letter submitted to the department by AngloGold's North America Exploration Manager Jeff Pontius. Maximum depth of the core holes will be 2,000 feet.

The Eagle property, several miles southwest of Pogo between the Goodpaster River flats and the Shaw Creek flats, will also be drilled this year. Recent claim staking by the two companies also increased the size of the Eagle block, to 24.6 square miles.

AngloGold submitted an exploration application with the state, requesting permission to drill up to 30 core holes on Eagle this summer. Again, the work will be conducted by helicopter. Maximum depth of the holes will be 2,000 feet.

AngloGold plans to spend $2 million on exploration in Alaska this year, Pontius told Mining News in early April. The amount of drilling will increase from the seven holes punched in the ER property in 2003.

The company has expanded its presence in the Pogo area through claim staking. Including lands staked with partners and by itself, AngloGold's total acreage is 61,000 hectares, Pontius said. That translates to 150,731 acres, or 235 square miles.

Total claims staked in the Pogo area are more than 500 square miles, or 322,920 acres, according to records kept by the Alaska Department of Natural Resources. Of those claims, about 200,000 acres of land — 312.5 square miles — have been staked since late 2002, throughout 2003 and in the first months of 2004.

—PATRICIA LILES, Mining News editor

Petroleum news

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

Dan Wilcox	CHIEF EXECUTIVE OFFICER
Mary Craig	CHIEF FINANCIAL OFFICER
Kay Cashman	PUBLISHER & MANAGING EDITOR
Kristen Nelson	EDITOR-IN-CHIEF
Patricia Liles	MINING NEWS EDITOR
Steve Sutherlin	ASSOCIATE EDITOR
Laura Erickson	SPECIAL PROJECTS COORDINATOR
Gary Park	CALGARY CORRESPONDENT
Wadeen Hepworth	ASSISTANT TO THE PUBLISHER
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Forrest Crane	CONTRACT PHOTOGRAPHER
Steven Merritt	PRODUCTION DIRECTOR
Tom Kearney	ADVERTISING DESIGN MANAGER
Susan Crane	ADVERTISING DIRECTOR
Mapmakers Alaska	CARTOGRAPHY
Heather Yates	CIRCULATION MANAGER
Dee Cashman	CIRCULATION REPRESENTATIVE
Tim Kikta	CIRCULATION REPRESENTATIVE

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

EDITORIAL
Fairbanks
pliles@petroleumnews.com
Anchorage
907.522.9469
Juneau
907.586.8026

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

North of 60 Mining News is a monthly supplement of Petroleum News, a weekly paper. 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 $52 per year, which includes online access to past stories and early access to Petroleum News every week. (Outside the U.S. the annual price is $165.95.) Or, just purchase the online edition of Petroleum News, which also includes the mining supplement and online access to past stories, for $29 per year.

CANADA

Targets identified at Black Lake diamond project

Results from a preliminary ground geophysical exploration program on the Black Lake diamond project in the Northwest Territories identified five high priority geophysical targets for drilling, the joint venture operating the project announced June 8.

Kalahari Resources Inc. and joint venture partners SouthernEra Resources Ltd. and Island Arc Mining Corp. said the program tested two kimberlitic indicator mineral trains — North Margaret Lake and South One.

The program has defined five high-priority geophysical targets with bulls-eye magnetic geophysical signatures ranging between 50 to 100 meters in diameter.

The program has defined five high-priority geophysical targets with bulls-eye magnetic geophysical signatures ranging between 50 to 100 meters in diameter. The five targets will be ground checked and sampled during July followed by drill testing of targets that return positive results from the follow-up program.

—**DON WHITELEY,** Petroleum News contributing writer

● NUNAVUT

De Beers, Tahera to develop adjacent to Jericho diamond project

Tahera to spend $11M by '08 to earn 50% interest in property; De Beers will operate larger projects

By DON WHITELEY

Petroleum News Contributing Writer

International diamond giant De Beers and Canadian junior mining company Tahera Corp. have signed an agreement to jointly explore and develop 36,000 hectares of de Beers' land adjacent to the Jericho diamond project in Nunavut.

According to the terms of the agreement, Tahera will spend $11 million by 2008 to earn a 50 percent interest in the property. The agreement has been structured so that each company can act as operator, as the development grows, depending on the size of the project.

"There is a natural fit between De Beers and Tahera Corp. for this property and this partnership seeks to optimize opportunities for both parties through the synergies we have identified," said Richard Molyneux, president and CEO of De Beers Canada. "The significance of this agreement is its flexibility regarding who will be the operator and how the product will be marketed."

Each company can raise its interest in individual development projects depending on the project value. For projects of C$750 million or less, Tahera will be the operator and can increase its interest to 75 percent by making certain payments to De Beers.

For larger-scale projects, De Beers will be the operator, and coordinate the construction of a processing plant. De Beers can increase its interest to 70 percent by making payments to Tahera.

Four kimberlites on property

The property, 14 kilometers west of Jericho, has four diamondiferous kimberlites, including the sizeable Muskox pipe.

"We believe that this partnership with Tahera is the most efficient means to move these kimberlite discoveries forward and this will put us firmly on the map with project development in Nunavut," Molyneux said in a statement.

The property, 14 kilometers west of Jericho, has four diamondiferous kimberlites, including the sizeable Muskox pipe.

De Beers' land holdings in Canada total 163,000 square kilometers, with 139,000 kilometers in Nunavut. Two mining projects are under development, Snap Lake in the Northwest Territories and Victor in Northern Ontario. The company will spend 43 percent of its US$92 billion global exploration budget in Canada.

In that vein, De Beers is also launching a C$1 million exploration program Nunavut's Kivalliq region. The company has already held public meetings in Rankin Inlet and Chesterfield Inlet.

Project Manager Paulo Pereira said in a release the company will be taking 3,000 samples from two areas north of Baker Lake this summer. "That's the new frontier for diamond exploration in Canada," he said.

Meanwhile, Tahera's $50 million Jericho Mine — the first diamond mine in Nunavut — has moved a step closer to reality. The Ministry of Indian Affairs and Northern Development has accepted the Nunavut Impact Review Board's report on the proposed Jericho Mine. Tahera now moves to the permit stage.

The mine, about 350 kilometers southwest of Cambridge Bay, is expected to employ up to 175 people during mine and plant construction, in the open-pit and underground operations as well as in its processing plant. The company hopes to have Inuit make up almost two-thirds of its staff.

Company officials say the mine could be operational as early as 2005. ●

● NORTHWESTERN BRITISH COLUMBIA

Major drilling kicks off at Galore Creek

NovaGold and its Canadian subsidiary SpectrumGold increase exploration spending at remote gold-silver-copper property, new resource shows more metals and better grades

By PATRICIA LILES
Mining News Editor

NovaGold Resources and its Canadian subsidiary SpectrumGold are increasing spending this year for the company's Galore Creek property in remote northwestern British Columbia, kicking off a large, aggressive drilling and advanced exploration program in late May.

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

Three core rigs will work through the summer, completing more than 60,000 feet of samples. NovaGold has increased its exploration budget for Galore Creek, with plans to spend more than $8 million Canadian in 2004.

Last year, NovaGold optioned the property through its Canadian subsidiary SpectrumGold, and completed an eight-hole, 10,000-foot drill program in the fall. That initial work was combined with data taken from more than 300 historical holes to produce a new resource calculation announced May 5.

That new geological estimate, calculated by an independent engineering firm, increased in both the amount of metals contained in the deposit and the amount of higher-grade material that would help pay back initial capital costs of a mine project.

"This updated resource estimate clearly demonstrates that Galore Creek is a very large, high quality, porphyry-related gold-silver-copper deposit," said Rick Van Nieuwenhuyse, president and CEO of NovaGold and SpectrumGold. "The study also confirms that we have already achieved 70 percent of our initial 100 million tonne higher-grade target."

An industry benchmark for large copper deposits involves identifying a minimum of 100 million tons of mineralization grading 1 percent or higher. That initial high-grade material typically will cover initial capital costs, providing the ability to later mine lower grades of mineralization. Galore Creek's new resource identifies 70 million tons of material with grades of one gram per tonne of gold and 1 percent copper.


COURTESY SPECTRUMGOLD

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

Estimate grows in copper and gold mineralization

The deposit remains open along strike and down dip. More nearby targets remain unexplored or under explored. Only two of 12 mineralized zones on the property were included in the new resource, according to NovaGold's vice president of exploration, Joe Piekenbrock. "We believe that there is excellent potential to add significantly to the overall resource and expand the higher grade zones of mineralization this season."

see GALORE CREEK page 7

NORTHWESTERN ALASKA

Ambler property in northwestern Alaska

NovaGold ramps up for Ambler; first season on volcanogenic massive sulfide deposit

NovaGold Resources plans to work on its other large metals deposit this summer, the Ambler property located in the remote part of northwestern Alaska, filing a permit with the state to drill up to 21 core holes.

NovaGold plans its initial 2,000-meter (6,400 feet) drilling work at the Arctic deposit, the most advanced target on the Ambler property. Previous exploration identified an inferred resource at Arctic, containing 817,000 ounces of gold, 62.1 million ounces of silver, 3.2 billion pounds of copper, 4.2 billion pounds of zinc and 640 million pounds of lead.

The company announced a $1.5 million budget for the property earlier this year, shortly after signing an agreement with Kennecott to acquire a 51 percent interest in the gold, silver, copper and base metals deposit.

Helicopter-supported exploration work will take place between June 15 and Sept. 30, according to the company's annual exploration application filed with the Alaska Department of Natural Resources on May 17.

Crews of up to 15 people will be staged out of the Bornite Camp, in an existing facility owned by the NANA Corp. about 14 miles southwest of the Arctic deposit.

Drill holes will range in depth from 500 feet to 2,000 feet, according to exploration plans outlined to the state by project manager Stan Dodd. Most of the work, 17 holes and 2,700 feet of constructed drill trails, will be on private patented claims. Three holes and 1,100 feet of trail will be on unpatented federal claims and one hole will be on state of Alaska claims.

NovaGold plans its initial 2,000-meter (6,400 feet) drilling work at the Arctic deposit, the most advanced target on the Ambler property. Previous exploration identified an inferred resource at Arctic, containing 817,000 ounces of gold, 62.1 million ounces of silver, 3.2 billion pounds of copper, 4.2 billion pounds of zinc and 640 million pounds of lead.

That puts the Arctic deposit in the top volcanogenic massive sulfide deposits in the world based on in-situ metal value, according to the company's statement.

NovaGold can earn its 51 percent interest in Ambler by matching Kennecott's historical spending on the property, which totals $20 million. NovaGold has until 2016 to do so, although the agreement requires a minimum of $5 million on exploration and development spending during the first five years.

—**PATRICIA LILES,** Mining News editor

● PETERSBURG, ALASKA

Woewodski drilling nearly complete

Bravo Ventures funds nine hole core program to test three massive sulfide prospects on small Southeast Alaska island

By PATRICIA LILES
Mining News Editor

Spending about $250,000 on its first phase of drilling this year, Bravo Venture Group hit the ground mid-May with a core drill to test three prospects on the Woewodski Island property in Southeast Alaska about 18 miles southwest of Petersburg.

The 3,000 meter drill program will be completed mid-June, according to Jay Oness, vice president of investor relations for the Canadian junior, part of the Manex Group of mineral exploration companies.

"We might increase that (drill work)," Oness told Mining News June 7. "We're getting some excellent results — some nice material at both the Mad Dog and Lost Lake deposits." Crews punched four holes at the Mad Dog prospect then moved the drill rig to the Lost Lake prospect, where three holes were drilled. Average depth of the holes is 200 to 300 meters, Oness said.

> *"We might increase that (drill work). We're getting some excellent results — some nice material at both the Mad Dog and Lost Lake deposits."* **—Jay Oness, vice president of investor relations, Bravo Venture Group**

The third prospect, Crab Bay, will receive the remaining drill footage in this first phase of exploration at Woewodski, a polymetallic deposit containing gold, silver, zinc, lead and copper.

"We feel we've got a tremendous opportunity to advance a massive sulfide deposit on the island," Oness said. "We're hoping Mother Nature is kind to us and assay results will reflect that."

Depending on results from this early summer exploration program, Bravo Venture could return to Woewodski later this year for more work, Oness said.

"We might be doing another financing," he said. "We raised $1.4 million in Bravo, so we have the funds available for the different properties."

In April 2003, Bravo Venture optioned the Woewodski Island claims from Olympic Resources, a Southeast Alaska-based privately held exploration company, providing access to nearly the entire four-by-five mile island. Terms of the acquisition agreement allow Bravo to earn a 100 percent interest in the property over a five-year period by spending $2 million on exploration and development, issuing 400,000 shares to the property owners and carrying the holding costs of the claims.

Similar to Greens Creek volcanic massive sulfide

Following a successful initial exploration program in 2003, which included rock sampling and limited core drilling on the Lost Lake prospect, Bravo staked three additional claims on the island.

"Bravo is encouraged by the early returns from the property," the company said, in a November 2003 press release announcing some high-grade surface samples. "Precious-metal-rich sulfides identified in the 2003 surface sampling and confirmed in several exploratory 'winkie' drill holes together with the newly acquired historical data supports a Greens Creek type exploration model," the company said.

About 110 miles north of Woewodski Island, Greens Creek produces gold, silver, zinc, lead and copper from its underground mine near Juneau. More than 10 different synergetic volcanic massive sulfide and gold quartz vein targets are located on the Woewodski property, according to Bravo's website.

In addition to drilling, historical grids have been re-established and orientation soil sampling has been conducted at the Brushy Creek, Boulder Point, Crab Bay and Lost Lake prospects, according to the company's May 13 press release. New sulfide discoveries have been identified at Goose Cove, Hattie and West Brushy Creek. Soil lines have tested mineralized zones along Butterworth Island and in the Mad Dog South area. Results are pending from 58 rocks and 91 soil samples gathered on the property.

2003 exploration identifies geophysical targets

Based on historical work, including Hydra-Wink drilling and surface sampling, the property contains a geological inventory of 500,000 tons, with grades of 8.1 percent zinc, 0.6 percent lead and 2.3 ounces of silver per ton of rock at the Lost Lake prospect, and 8.9 percent zinc, 2.2 percent lead and 8.1 ounces of silver per ton of rock at the Mad Dog prospect.

"Detailed evaluation of newly acquired airborne geophysical data covering Woewodski Island has identified 93 different geophysical targets of which 26 anomalies are considered high priority for 'conductive' massive sulfide type targets," Bravo said on its website.

In 2003, the company completed 1,402 feet of scout diamond drilling at Lost Lake prospect where high-grade massive sulfides intersected in past winkie drilling confirms previous drill results. One of those holes produced a 1.8 meter (5.9 foot) intercept, grading 222 grams of silver (7.1 ounces) per ton of rock, 6.34 percent lead and 16.15 percent zinc. ●

Other Manex Group work planned at Duke Island, Divide property

Bravo Venture's parent company, the Manex Group, has four other exploration companies, two of which have worked in Alaska.

Quaterra Resources currently holds the Duke Island PGE, copper and nickel prospect about 30 miles southeast of Ketchikan. The company plans to start core drilling on that project in late August, according to Jay Oneness, vice president of investor relations. A final exploration budget has yet to be determined by company president Tom Patton, Oness said on June 7. Tentative plans call for a 5,000-meter (16,000-foot) core drill program.

That property contains 18 different targets, with two well-exposed zoned ultramafic bodies, he said. The Judd Harbor body is estimated to be two miles in diameter, and the Hall Cove body is believed to be three and one-half miles in diameter.

"It looks like they are part of the same complex — we've interpreted them to be parts of the same intrusive body at depth," Oness said. Last year, Quaterra completed a large airborne geophysical survey at Duke Island, he said.

"Because of the size of the project, we could not afford to fund (ground work) at that time, due to market conditions and the price of our stock."

Another exploration company in the Manex Group, Rio Fortuna, has dropped its remaining Alaska property, announced in late May.

That property, called Divide, was 28 miles north of Nome in western Alaska.

"It was a very expensive project and due to market conditions, we were not able to get back up there," Oneness said. "We decided the best use of our funds is in Nevada on the Highlands joint venture program there."

Rio Fortuna acquired the road-accessible Divide property in 2002, according to the Alaska Mineral Industry report. Its agreement called for spending $1 million over a five-year period and issuing 1 million shares of Rio Fortuna common stock.

Rio drilled 18 holes totaling 4,452 feet on the property in 2002, and completed minor exploration at Divide in 2003, according to state records. The company also acquired, then dropped in 2003, another Nome-area road accessible exploration property, called Full Auto.

Manex also has two other companies which are working on properties in Mexico.

—PATRICIA LILES, Mining News editor

● NORTHWEST TERRITORIES

High costs, no benefits, says report

Canada's mining industry raises hackles by attacking valued-added diamond cutting and polishing requirements

By GARY PARK
Petroleum News Calgary Correspondent


MINING ASSOCIATION OF CANADA

The study, which described Canada as a "diamond powerhouse" said that by providing the right mix of fiscal and regulatory policies, governments can ensure diamonds benefit all Canadians.

The cutting and polishing sector of Canada's much-touted diamond industry needs some trimming and buffing of its own, suggests a new report from the mining industry that has angered the Northwest Territories government.

The study, entitled National Diamond Strategy: An Industry Response, said efforts to build a value-added component to the thriving diamond mines has resulted in "short-term, unsustainable policies" that penalize primary producers and in money-losing ventures that employ too many foreign workers.

"Clearly any cost-benefits analysis of efforts to enter the cutting and polishing industry in Yellowknife would paint a stark picture," the study said.

It was compiled by three industry heavyweights — the Mining Association of Canada, the Northwest Territories and Nunavut Chamber of Mines and the Prospectors and Developers Association of Canada.

Findings inflame Northwest Territories premier

The recommendations were distributed to Canada's 13 provincial and territorial governments, which are working on a national strategy.

The findings inflamed Northwest Territories Premier Joe Handley, who said that if the industry is not ready to work with his government on a value-added sector, then "we've got to look at what the alternatives are."

He said that because the resource royalties from diamonds go directly to the Canadian government, a secondary industry is the only way the Northwest Territories can diversify the benefits of diamond mining.

Failing that, Handley warned, the only option is for the Northwest Territories to impose a tax on production.

"We entered into agreements with diamond companies to have their support in setting up a (cutting and polishing) industry in lieu of us levying some sort of tax," he told the Globe and Mail.

"If the diamond industry does not want to participate with us in supporting the diamond polishing sector and the jewelry industry, where the real profit is, then it's time for us to sit down and talk."


MINING ASSOCIATION OF CANADA

Handley said the industry's thinking is flawed, because the territory does not get any resource royalties.

Other producing countries also want spin-off industries

Stephen Ben-Oliel, president of the Canadian Diamond Manufacturers Association, lent weight to Handley's argument, noting that other diamond producing countries are also demanding a slice of the output to build their spin-off industries.

He said that to focus on labor costs is short-sighted, making no allowance for increasing automation in the industry.

The Northwest Territories government requires mining companies to sell 10 percent of their select, high-quality rough diamonds to local factories to derive some direct economic gains from the Ekati and Diavik mines, which have made Canada the world's third-largest producer behind Russia and Botswana.

The government last year estimated that the two mines, plus the Snap Lake mine scheduled to start operations in 2008, are expected to generate C$7.5 billion in government revenues over their operating lives. But that report said the Northwest Territories will gain only C$260 million.

There are four cutting and polishing factories in Yellowknife, which "have had to rely on government subsidies and industry support to remain in business," while employing fewer than 150 workers in "relatively low-paying jobs," the mining industry study said.

"If we're looking at valued-added industries downstream, we have to make sure that they are sustainable and make sense in the economic reality of doing business in Yellowknife, said Mike Vaydik, general manager of the Chamber of Mines.

"The benefits to diamond mining are tremendous and we're only just beginning," he said.

Exploration called key to long-term supply

Tony Andrews, executive director of the prospectors and developers association, said "exploration is the key to assuring the long-term supply of Canadian diamonds, which will underpin the growth of other parts of the diamond pipeline."

The study, which described Canada as a "diamond powerhouse" said that by providing the right mix of fiscal and regulatory policies, governments can ensure diamonds benefit all Canadians.

It called for governments to:

- Improve the investment climate for exploration and mining by reducing the uncertainty and complexity of Canada's regulatory environment.
- Invest in northern geoscience and infrastructure and human resource skills development and to modernize the tax system.
- Conduct a thorough economic analysis of the competitiveness and cost structure of the diamond cutting and polishing industry to properly identify the economic opportunities to develop the downstream activity.
- Avoid the use of short-term, unsustainable policies to stimulate the development of cutting and polishing.
- Eliminate the federal excise tax on jewelry.

The report said that De Beers, which is developing the Snap Lake mine, has awarded C$29.2 million in contracts, of which C$22 million went to companies partly owned by aboriginals. ●

continued from page 5

GALORE CREEK

The new resource at Galore Creek contains two categories, both using a 0.5 percent copper equivalent cut-off grade. The indicated resource is estimated to contain 4 million ounces of gold, 52.2 million ounces of silver and 4.6 billion pounds of copper. Additional mineralization in the inferred category includes 1.2 million ounces of gold, 17.2 million ounces of silver and 1.3 billion pounds of copper.

The resource increased in the gold category by 15 percent, and in copper, by 14 percent, compared to the historical geological estimate.

Drilling work begins

Drilling work this summer is targeted, in part, to upgrading the inferred resources to the indicated category, as well as expanding the current resource. The company also plans to drill to define the initial 100 million tons of mineralization with 1 gram per tonne of gold and 1 percent copper for the initial payback of mine capital.

NovaGold has also prioritized high-grade targets at Copper Canyon, Junction and the South Zone, as well as on the adjacent Grace property. Finally, the company plans to explore for additional mineralization on several recently identified geophysical targets and known mineralized occurrences.

In addition to the 60,000 feet of drilling, NovaGold plans to complete a detailed, property-wide MAG, CSMAT and 3-D induced polarization geophysical survey program to generate additional drill targets.

Environmental consultants will also be working on the property this summer, according to NovaGold. The Tahltan Nation Development Corp. and Rescan Environmental Services have formed a new joint company called RTEC to carry out baseline environmental work, in preparation for the project's environmental assessment report.

As many as 70 people are expected to be working at Galore Creek this summer, NovaGold said, in preparation for a pre-feasibility study expected to be complete in mid-2005.

Later this summer, NovaGold expects to release a preliminary economic assessment study, being completed by Hatch of Vancouver, the independent engineering firm that calculated the new Galore Creek resource. That new study will consider mine development options, infrastructure, power and access options, site layout, metallurgy, development timetables and capital and operating costs.

Work this summer also will expand the on-site camp facilities, as well as improving existing infrastructure. The existing airstrip will be rehabilitated, a series of bridges will be rebuilt and road access to the Main and Southwest deposits will be repaired.

Company consolidation continues

NovaGold is continuing with plans to acquire the remaining 44 percent of common shares of its Canadian subsidiary, SpectrumGold, bringing the assets of both companies under the NovaGold banner.

A SpectrumGold shareholder meeting and vote is planned for July 8. With the appropriate affirmative vote, the plan to combine the companies will be concluded between July 15 and Aug. 15, the company said in its June 3 press release. ●

● FAIRBANKS, ALASKA

Neighboring prospects get new look

New Alaska exploration manager for Kinross plans early-stage exploration work on gold occurrences near Fort Knox, True North

By PATRICIA LILES
Mining News Editor

In his first season as the Alaska and Russia exploration manager for Kinross Gold, Rich Harris will be spending about $2.5 million on exploration in 2004, mostly for early-stage prospects neighboring the company's Fort Knox and True North mines northeast of Fairbanks, Alaska.

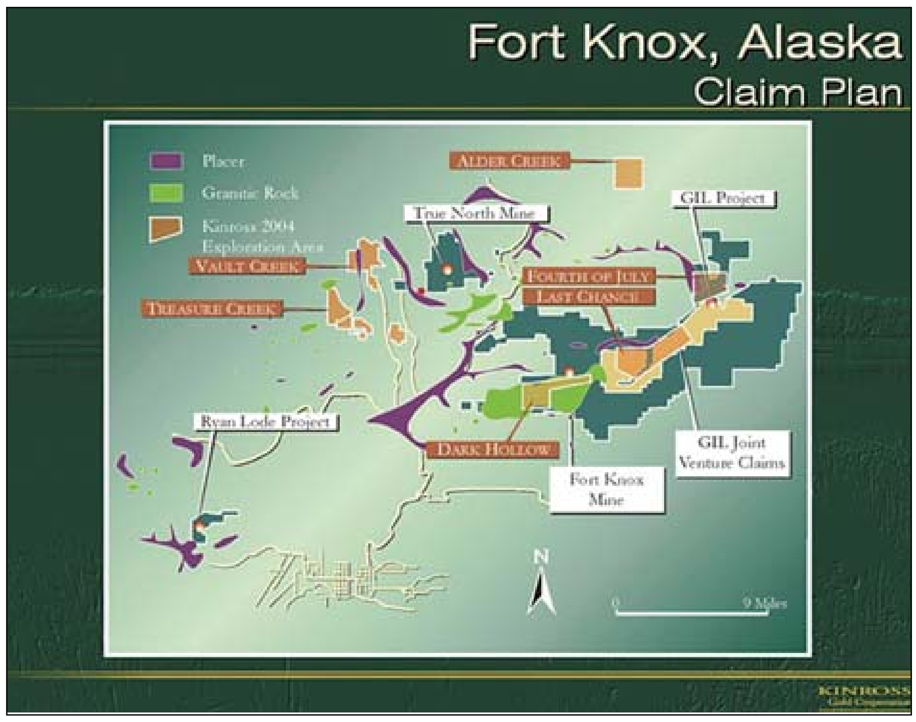
Final budgets for several projects, including three prospects neighboring True North and three others in the Fort Knox/Gil area, are still pending, Harris said in interviews June 1 and June 5.

"Everything is being reevaluated locally. We're looking at the whole approach to see if we need to make some changes," he said. "It's a time of big changes ... we're re-looking at the whole district and properties to see the possibilities out there."

In late April, Kinross lured Harris away from his most recent position as minerals development specialist for the Alaska Department of Commerce and Economic Development, counting on his past experience in the Interior with Newmont Gold, primarily as project geologist at True North before Kinross acquired the property.

His fresh view of Kinross properties provides some broader thinking, geologically, that he hopes will translate into some new discoveries.

"No one had stepped back to look at the bigger picture. You get so you can't see the forest for the trees — so burrowed in," he said. "I think that's one reason why I got the position, to provide a new look — to have someone with another view and different background."



One significant change is scaling back development work and infill drilling at Gil. Instead, work this summer will focus on finding nearby mineralized areas for additional targets. (See sidebar.)

In-pit exploration expands

Exploration work that has already started includes a $1 million drilling program to further define targets within and adjacent to the existing Fort Knox pit.

Harris said about 15,000 feet of core samples and 5,000 feet of reverse-circulation samples will be drilled this year as part of the in-pit exploration effort. Some holes will be drilled from the lowest level of the pit, to see if recoverable mineralization exists at depth. Other holes will be drilled to look for extensions of mineralization to the east, south and west. The goal is to find additional gold to mine and mill, extending the life of Fort Knox beyond the current 2009-2010 ending currently projected.

"A conservative number might be 50,000 to 100,000 ounces (of additional gold), but obviously we hope to increase that as much as we can," Harris said. "Some drilling is directed towards increasing the size of the ultimate pit ... a little deeper and pushing out a bit, but there are a lot of variables."

Last year, Kinross said it spent $710,000 on its in-pit exploration program, part of the company's $3.2 million spent on exploration in Alaska. This year's program is changing slightly, with some expansion drilling, Harris said.

"Most of the core drilling is directed toward pit expansion," he said. "The reverse circulation holes are on the perimeter ... (they are) expansion targets. We're stepping out from the pit."

Those extension holes will include two drill holes to the west, where the Fort Knox claim block adjoins federally controlled land associated with the National Environmental Satellite, Data and Information Service, also called NOAA.

Kinross' subsidiary, Fairbanks Gold Mining Inc., drilled seven reverse circulation holes on that property in 2003. While specific results were not released, the company said in late January that mineralization traced to the adjacent NOAA property could not be pulled into the Fort Knox

see **PROSPECTS** *page 9*

Kinross Gold scales back Gil project, refocusing on discovery exploration

Work on Kinross Gold's most advanced exploration property in Interior Alaska, the Gil deposit, will scale back considerably this year.

Rich Harris, Alaska and Russia exploration manager for Kinross Gold, said the focus has shifted from drilling the known deposit of Main and North Gil, about seven miles from the Fort Knox mill complex, to looking for mineralized zones in the surrounding area.

Work on Kinross Gold's most advanced exploration property in Interior Alaska, the Gil deposit, will scale back considerably this year.

"We're looking to test the complete target outside the known deposit … to explore along the Gil trend," he said. "The emphasis is on evaluating the potential of the larger area. I feel it hasn't been aggressively explored in recent years."

Soil sampling and trenching will kick off that effort later this summer, and may be followed up with drilling.

Right now, the company plans to drill about 1,200 feet of core samples and 5,700 feet of reverse circulation samples at or near Gil, Harris said. A final budget has not yet been approved.

Those new prospects include Last Chance, between the mine and the Gil claims and Fourth of July Creek, north of the Gil project. The goal is to find additional sources of mineralization near Gil to justify opening the area as an additional satellite mine.

Given the current geological knowledge about Gil, the deposit isn't large enough to tap, according to Harris and to past Kinross corporate statements.

"In the 11 years that they've been working on Gil, off and on, the resource has gotten smaller," Harris said. "They started out with some fairly lofty expectations and those numbers become gospel. Then people become disappointed when the results didn't come back as expected."

Estimates for Gil, now in a reserve category, are about 150,000 ounces in the two deposits.

"It's shrunk down too small to be attractive to put a road out there," Harris said.

Last year, Kinross and its partner on the Gil property, Teryl Resources, spent about $1.6 million on the advanced exploration project. That included 127 reverse circulation holes totaling 28,000 feet, 31 core holes totaling 8,917 feet, four trenches totaling 1,150 feet and 358 rock samples collected for assaying, according to an April 21 press release from Teryl.

Rather than spend more money for infill drilling, Harris said the project could be improved with new discoveries along the Gil/Fort Knox trend.

"It's a pretty compelling trend and in my view, very prospective," he said. "It's almost 20 miles long with a major deposit and throughout it gold occurrences and significant placer occurrences, but only fairly lightly explored. It represents a really nice opportunity and is viewed as a significant exploration asset with the opportunity to make a major discovery."

—PATRICIA LILES, Mining News editor

continued from page 8

PROSPECTS

pit design.

True North area prospects

New attention will be given this year to four prospects neighboring the True North mine, a satellite deposit about 10 miles from Fort Knox that has provided additional mill feed at Fort Knox since 2001.

Harris came to Alaska in the early 1990s to work on the True North prospect for Newmont Gold, which later sold its interest in the property to Kinross. Now the exploration work has a specific goal-to provide additional mill feed at Fort Knox.

"It's close enough to True North that if we identify something, we could fast-track it to the mining stage," Harris said.

Those neighboring prospects include Treasure Creek and Vault Creek, 15 to 20 miles northwest of Fort Knox and west of True North, west of the Elliott Highway.

The third prospect, Newsboy, is on the north side of Pedro Dome, adjacent to the Steese Highway. Harris described it as a "fairly robust soil anomaly," which should see some reverse circulation drilling this year, as well as at Treasure Creek and Vault Creek.

The fourth prospect is adjacent to True North, south of the existing mill site lease boundary, according to the company's exploration application filed with the Alaska Department of Natural Resources on May 20.

A fifth prospect, Alder Creek, is considered more of a grassroots exploration property. It is roughly 10 miles north of Fort Knox. Harris plans some soil sampling on that geological play this year.

In its state exploration application, Fairbanks Gold requested permission to drill up to 30 holes annually, with a maximum depth of 600 feet, on these five prospects. They also requested permission to cut up to 10 trenches, up to 50 feet long, 20 feet wide and 10 feet deep.

"Plans for this year are some soil sampling and mapping where possible, perhaps some drilling," Harris said. "These are grassroots properties ... an area with some obviously placer goal potential, where Chatanika terrain rocks are poorly exposed." ●

CENTRAL ALASKA

MAX Resource acquires Gold Hill property in central Alaska

Vancouver, British Columbia-based MAX Resource Corp. announced on May 17 its acquisition of the Gold Hill exploration property in central Alaska, near Cantwell.

The company plans to begin an extensive exploration and drilling program in June, subject to acceptance for filing of the acquisition option and weather conditions in the area, MAX said in its press release.

MAX entered into an option agreement with Zazu Exploration Inc., a privately held Texas corporation, which holds a lease on the Gold Hill claims from General Crude Oil Minerals Co.

MAX entered into an option agreement with Zazu Exploration Inc., a privately held Texas corporation, which holds a lease on the Gold Hill claims from General Crude Oil Minerals Co. General Crude Oil acquired the property in 1983, according to MAX's press release, and conducted some geologic and geophysical work, including drilling five core holes. The best intercept was 11.5 feet, averaging 0.668 ounces of gold per ton of rock.

Amax Gold, looking for a bulk tonnage gold occurrence in the late 1980s, conducted other previous exploration work. Amax completed 5,885 feet of reverse circulation drilling in 21 holes, hitting some high-grade intervals but no thick intervals of lower grade mineralization.

Gold Hill was originally drilled for molybdenum in the early 1970s, but some of the holes were not assayed for gold then. A large soil geochemical anomaly exists, both on Gold Hill and the neighboring West Hill on the west side of the property.

Hydrothermal alteration is pervasive throughout the property, MAX said in its press release. Area creeks contain placer gold and have been worked in the past.

—PATRICIA LILES, Mining News Editor

KETCHIKAN, ALASKA

Work starts at Union Bay property 35 miles northwest of Ketchikan; Lonmin funds $1.2M for platinum exploration∆

Freegold Ventures and Pacific Northwest Capital announced plans June 1 to begin drilling mid-June at the company's Union Bay property about 35 miles northwest of Ketchikan, Alaska, a $1.2 million exploration program being funded by Lonmin Plc.

"Exploration will commence immediately with a detailed geological mapping and sampling program and an airborne magnetic and electromagnetic survey," the company said in its press release. Crews will complete 9,000 feet of drill samples during this summer's season, according to Freegold, initially targeting the Continental and Chevelle zones, where rock samples taken last year returned values ranging from 1 to 14 grams per ton of platinum.

Another success of that 2003 program was discovery of a separate zone of copper, platinum and palladium bearing sulfides at Cannery Creek on the western side of the Union Bay project, close to the margin of the complex. That zone remains open to the north and east, according to Freegold's June 1 press release.

The Continental zone, some five kilometers west of where 2003 drilling took place, is a recently discovered mineralized area.

Freegold President Harry Barr said last year that the Continental "looks very significant, in terms of surface samples." Mineralization at Continental and Chevelle is hosted by similar rock types to the previously reported occurrences at the North and Jaguar Zones, where drills completed 4,490 feet of diamond core drilling in 2003. Lonmin funded that work, also, the platinum producer's first foray in Alaska.

If results look good, more could be spent this year

Lonmin's agreement with Freegold and Pacific Northwest calls for annual spending of a minimum of $1 million in 2004, 2005 and 2006, with a minimum of $750,000 afterward.

"Should the results of the data review prove to be sufficiently positive, Lonmin may elect to incur further expenditures before the end of the 2004 field season," Freegold said in its press release.

Lonmin did bump its exploration spending midway through the 2003 work program, allowing geologists to spend an extra 30 days on the property, Barr said then.

In a Jan. 20 press release, Freegold and Pacific Northwest released some drill results from the 2003 program, calling it "most encouraging." Drilling at Jaguar produced some of the largest, high grade intercepts, including a 3.8 foot section grading 7 grams of platinum per ton of rock. The North Zone produced a 1.7 foot intercept, grading 10.59 grams of platinum per ton of rock.

Another success of that 2003 program was discovery of a separate zone of copper, platinum and palladium bearing sulfides at Cannery Creek on the western side of the Union Bay project, close to the margin of the complex. That zone remains open to the north and east, according to Freegold's June 1 press release.

Results of the Continental, Chevelle and Cannery Creek zones were available only after completion of the field season, Freegold said.

—PATRICIA LILES, Mining News editor

● DELTA JUNCTION, ALASKA

Pogo gold project shows progress

Developers OK final feasibility study, production program; construction costs increase, initial gold production expected in March '06

By PATRICIA LILES
Mining News Editor

Partners in the Pogo gold project northeast of Delta Junction, Alaska, have officially approved the final feasibility study and production program, announcing plans on June 4 to complete construction and begin initial gold production in March 2006.

Production will ramp up to commercial rates by the end of August, 2006, the three partners said in a joint press release.

Development partners in the Pogo project, 40 miles northeast of Delta Junction in the upper Goodpaster River valley, include Teck Cominco Ltd., Sumitomo Metal Mining Co. Ltd. and Sumitomo Corp.

Construction of Pogo was expected to be complete late in 2005, prior to a permitting delay that arose earlier this spring. A Fairbanks-based environmental group in April filed an administrative appeal of the project's final water discharge permit, issued by the Environmental Protection Agency. Work stopped at the project until early May, when the issues were resolved and the appeal was withdrawn.

KARL HANNEMAN

Now, crews are filtering back to the remote work site, currently accessible by air. In late May, 225 people were working on site, according to Karl Hanneman, manager of public and environmental affairs and special projects for Teck-Pogo Inc. "That will gradually increase over the next few weeks," he said, peaking at 500 workers this summer and next.

Construction work on a 49-mile all-season road, connecting Pogo and the upper Goodpaster River valley to the Richardson Highway, should be complete this September, according to Teck Cominco's June 4 press release.

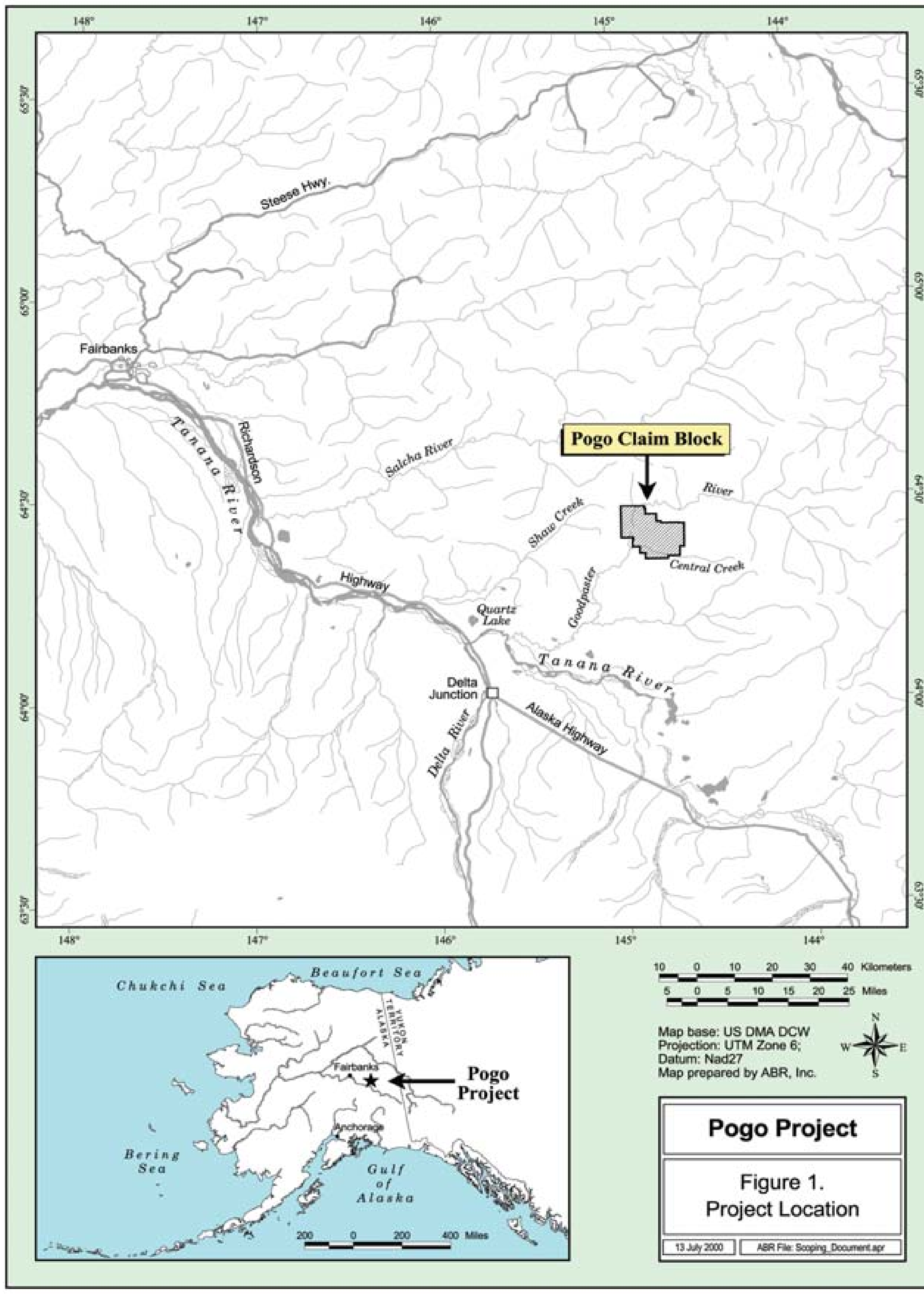
Approximately 600 truckloads of materials and supplies have already been hauled to the remote site on the temporary ice road constructed in January and early February. Remaining supplies will be brought in after the all-season road is completed this fall, Hanneman said.

Capital costs increase

Estimates for Pogo's capital costs have increased since the project's interim feasibility study was completed in late 2002, according to Teck Cominco. The weaker U.S. dollar and changes in steel and oil prices have bumped the estimated capital costs to $280 million, up $30 million from prior estimates.

That increased capital cost does not include expenses for interest, escalation and suspension and remobilization costs associated with the permit appeal, Teck Cominco said. The three companies intend to finance Pogo's capital costs through cash on hand and corporate credit facilities.

Once completed, Pogo's estimated production rate will be 460,000 ounces per year for the first full three years of production. Mill crews will process 2,500 tons of ore per day. Updated reserve and resources at Pogo contain 4.5 million ounces of gold, with grades averaging slightly below one-half ounce per ton of rock. The partners consider that there is "substantial potential for additions to reserves through near mine exploration," they said in the press release. ●



● NORTH AMERICA

King Coal returning to the throne

Blackouts, natural gas prices open way to first coal-fired plants since early 1990s; debate rages between 'clean-coal' believers, advocates of environmental controls; MIT's Loren Cox says coal plants can be as clean as a gas-fired plants

By GARY PARK

Petroleum News Calgary Correspondent

Long the symbol of a "dirty" economy and seemingly destined for oblivion in the age of global warming, coal is making a resurgence in the United States and Canada, propelled by the big blackout last summer and the volatility of natural gas prices.

It is a small advance, but 4,900 megawatts of coal-fired generation is under construction or in advanced development in the United States and another 11,000 megawatts is in early development, according to a Standard & Poor's report in March.

Beyond that, 90 new coal-fired power plants are on the drawing boards, with a combined capacity of 50,000 megawatts and a price tag of $75 billion. Currently, total U.S. electricity capacity is 900,000 megawatts.

Even those projects that are under way are the first coal-fired plants in about a dozen years and stem directly from the growing uncertainty around gas prices, said Loren Cox, associate director of the Center for Energy and Environmental Policy Research at the Massachusetts Institute of Technology.

"When gas prices are high and/or volatile and high, then there are enormous incentives to switch to coal because the price of coal is very stable and the resource base is so huge," he told a Calgary conference this year.

Although dual-fired power generation capacity has shrunk over the last 15 years, that trend could easily be reversed, Cox said.

"The owners of generation facilities want to stay in business," he said. "The one thing that no generator ever wants to experience is being shut down because the supply is not there."

Gas-fired plants built when gas cheap

When natural gas was cheap and plentiful in the 1990s, North America embarked on a wave of building gas-fired generating plants.

Now the pendulum has swung back, with fuel costs for gas generation as high as 4 cents per kilowatt-hour, compared with 1 cent for coal plants. The threshold price for gas production is estimated at $3 per million British thermal units, barely half current gas prices and sufficient to make coal-fired power a bargain.

"Two or three years ago we would have said sooner rather than later," said Thomas Shockley, chief operating officer of American Electric Power Co., the largest U.S. electricity generator, referring to the likelihood of coal-fired generation shutdowns. "But $5 gas pushed that out."

Brushing off the tarnished environmental image of coal, Cox said coal-fired plants can be "virtually as clean as a gas-fired plant" by eliminating all sulfur emissions.

Jim Dinning, an executive with Alberta-based utility TransAlta, said the term clean-coal is not a misnomer, noting that the coal gasification in use at several U.S. power plants turns coal into synthetic gas, hydrogen, sulfur, chemicals and a "relatively pure stream" of carbon dioxide that can be shipped to depleted oil fields for sequestration, or for enhanced oil and coalbed methane recovery.

"When gas prices are high and/or volatile and high, then there are enormous incentives to switch to coal because the price of coal is very stable and the resource base is so huge."
—Loren Cox, associate director, Center for Energy and Environmental Policy Research, Massachusetts Institute of Technology

Referring to the "naysayers," Dinning likened them to "the folks who said we'd crash at Y2K."

Duke du Plessis, a research manager at the Alberta Energy Research Institute, said there are now technologies that can "remove most or all emissions of concern" from coal in the production of power.

Still critics of clean-coal technology

However, the critics are not swayed, arguing that investment in clean-coal technology is a diversion of money from established electricity supply sources that already meet climate change and environmental protection targets, such as wind power.

At the nub of the debate in the United States is the extent to which coal can be a factor in national energy security.

The Department of Energy gives a strong vote of confidence by rating coal as "one of the true measures of the energy strength of the United States."

The Bush administration's energy strategy has endorsed that view by including coal as a key element of the energy mix and describing coal-fired generating plants as "the cornerstone of the United States' central power system."

Adding to the momentum, a preliminary report on natural gas submitted to the DOE by the National Petroleum Council promoted the goal of "alternative energy sources" for industrial consumers and power generation by opening the door to "greater flexibility in fuel-switching and fuel choice."

Still problems for coal

It's not all plain sailing for the coal industry, however.

Mark Zand, a principal at Wexford Capital, an investment company with interests in energy and natural resources, told Petroleum Economist that one of the problems with continuing low coal prices is that "producers don't make any money."

He said smaller, low-cost producers are being driven out by large-scale operations as they lose the battle to "make enough to cover liabilities such as future land reclamation and legacy costs — pensions and disability coverage." And once producers enter bankruptcy they "can't just come back," he said.

On the other hand, he said utilities must have coal no matter what the price, thus the "free ride" for consumers may be over.

While adopting a coal-friendly stance, the Bush administration has also acknowledged the environmental concerns by introducing legislation targeting further cuts in nitrogen oxides and sulfur dioxide emissions and, for the first time, proposing a cap on mercury emissions.

It is not yet clear what form those changes will take or when they might be imposed, but if plants are required to lower mercury emissions by 70 percent by 2018, coal-fired generators would face a severe challenge as would western U.S. producers whose coal has mercury content that is difficult to remove.

Hanging more heavily over the industry is the prospect of controls on emissions of carbon dioxide, identified as the greatest contributor to greenhouse gases.

The administration, because of its opposition to the Kyoto Protocol, does not touch the CO2 issue, but there has been movement in Congress to regulate CO2 — a threat that some analysts believe could kill one-third to one-half of the U.S. coal industry because there is no technology available to remove CO2 from coal-fired plants. ●

U.S. coal production

(in million short tons)

1999	1,100
2000	1,073
2001	1,127
2002	1,094

Source: U.S. Energy Information Administration

Electricity Generation in 2002

(power sector)

Coal	51.8%
Nuclear	21.2%
Natural Gas	16.3%
Hydro-electric	7.1%
Oil	2.3%
Others	1.2%

Source: U.S. Energy Information Administration

Want to know more?

If you'd like to read more articles about coal published in North of 60 Mining News or Petroleum News' mining section, go to Petroleum News' web site and search for these articles in the Petroleum News archives that were publishes in the last year. The Petroleum News archives hold all the North of 60 Mining News articles, as well as a mining section that appears within Petroleum News when news can't wait for the monthly North of 60 Mining News publication.

Web site: www.PetroleumNews.com

2004
- **June 6** Offer for coal plant rejected by state agency
- **June 6** Alaska mine power options down to three
- **May 23** Natural gas set to displace oil on world stage
- **May 9** Calista Corp. chooses Canadian coal
- **April 25** Coal project spurred by world demand
- **March 28** As gas prices rise, utilities plan new coal-fired plants
- **March 28** Ontario aims to close coal-fired plants by 2007, use renewable energy
- **March 14** Improving mineral development
- **Feb. 1** Usibelli puts coalbed on hold

2003
- **Nov. 16** Mining industry tops $1 billion — again
- **Nov. 2** Struggle simmers over power source
- **Sept. 28** Contracts signed to ship coal to Korea once again
- **Aug. 10** Coal — the king lives
- **Aug. 3** Power for Donlin Creek mine, Bethel, villages might come from local shallow gas, not B.C. coal
- **Aug. 3** Usibelli shifts to Two Bull Ridge
- **June 29** Stranded coal needs transportation
- **June 29** GVEA prepares power plant plans for construction bidding
- **June 15** Movement on Healy plant
- **March 14** Improving mineral development

Note: *Curt Freeman's monthly mining update, which carries briefs about coal, is not included in the above list. To find Freeman's column in Petroleum News' archives search for Curt Freeman and all the columns will pop up.*

YUKON TERRITORY

Yale options Dawson area property, to test high-grade, bulk tonnage gold

Vancouver, British Columbia-based Yale Resources Ltd. announced its option on the Golden Revenue property in southwestern Yukon Territory, accessible by a secondary highway branching off of the Yukon Highway.

In a May 17 press release, Yale said it is currently planning its drilling program to test both high-grade and bulk tonnage gold occurrences on the property in June and July. The company plans to spend a minimum of $400,000 on the property in 2004, and has already obtained exploration permits, according to Yale's website.

The 1,800-acre property consists of three contiguous claim blocks, called Nucleus, Revenue and Big Creek in the Dawson Creek mining district, the company said.

The 1,800-acre property consists of three contiguous claim blocks, called Nucleus, Revenue and Big Creek in the Dawson Creek mining district, the company said.

Two types of mineralization exist at the Golden Revenue property. One is a vein structure with high-grade gold and variable copper values. The second is gold stockwork and breccia zones with bulk-tonnage potential. Ten different prospects have been identified to date, two of which have some past exploration work, the company said.

The Nucleus Zone contains a swarm of subparallel porphyry dykes that cover an area 1,400 meters long and 500 meters wide. Drilling to date has been confined to a 200-meter square area. The best individual diamond drill intervals include 49.5 meters of 1.76 grams of gold per ton of rock, 36 meters of 1.36 grams of gold and 57.76 meters of 1.32 grams of gold.

High-grade gold structures were tested using a percussion hole drilling program. The best intercepts included a 13.72 meter intercept grading 34.86 grams of gold per ton, 16.77 meters grading 4.58 grams per ton and 6.1 meters grading 11.15 grams of gold per ton of rock.

The Discovery Zone prospect hosts both high-grade veins and stockwork zones with bulk tonnage potential, the company said. Three main vein structures have been identified, but they are poorly defined and have not been systematically drilled with modern equipment and technology, the company said. High grades of gold and copper were reported in an old adit and in trenches.

Yale can earn up to 70 percent interest in the property, subject to a 2 percent net smelter return applicable to two of the three property blocks.

—**PATRICIA LILES,** Mining News editor

● VANCOUVER, BRITISH COLUMBIA

Expatriate buys Atna's stake in Wolverine

MINING NEWS

Expatriate Resources says it has struck a deal with Atna Resources to purchase Atna's 39.4 percent interest in the Wolverine joint venture in the Yukon Territory. The deal, if approved by regulators, gives Vancouver-based Expatriate 100 percent ownership in the precious metals deposit and surrounding exploration properties.

Under the terms of the agreement, Expatriate will pay C$2 million in cash, issue 10 million shares and 5 million share-purchase warrants and provide a royalty on silver and gold production from the proposed mine. At current share prices, excluding royalty payments, the deal is valued at about C$6 million. Atna will walk away with about 11.7 percent of Expatriate.

The May 31 announcement "paves the way for advancing the completion of a feasibility study and development of Wolverine as an important new silver-gold-zinc-copper-lead mine," Expatriate said.

Wolverine contains about 75 million ounces of silver and 352,000 ounces of gold, as well as large amounts of zinc, lead and copper, Expatriate said.

"Recent improvements in the zinc concentrate markets and the rapid increase in selenium price has changed the market outlook for concentrates from the Wolverine deposit," the company said in a release. "The outlook for silver is also positive."

Logan exploration set aside

"Changing market conditions now make it feasible to reevaluate Wolverine as a stand-alone mine," the company said.

Expatriate said it has resumed planning and permitting of the proposed Wolverine underground test-mining and exploration program to provide the additional information required to finalize the Wolverine portion of a bankable feasibility study.

Expatriate said the Wolverine deposit is "key to development of the Finlayson district as a major base-precious metal mining camp."

The company has been evaluating the development of Wolverine in conjunction with the Logan deposit in southern Yukon. Expatriate said it intends to "expand exploration on its extensive claim holdings … concurrent with ongoing engineering studies and economic evaluation of Wolverine."

Exploration and engineering of the Logan deposit will be set aside until the evaluation of Wolverine is complete, the company said.

Expatriate is a base and precious metals exploration and development junior with projects in Yukon, Nunavut, Ontario, California and Chile. ●

● JUNEAU, ALASKA

State bonding considered for Kensington

Alaska Legislature approves bill allowing up to $20 million in AIDEA bonding for southeast gold mine development

By PATRICIA LILES
Mining News Editor

Developers of the Kensington gold project in Southeast Alaska received a solid vote of confidence from Alaska's state government, with nearly unanimous legislative approval of a bill that would allow up to $20 million in tax-exempt bonding for port and tailings impoundment facilities.

The bill was passed by the Alaska Legislature in early May and signed into law in early June. It's the first step in a six-month to year-long process of approving bonds issued by the Alaska Industrial Development and Export Authority for Coeur d'Alene Mines Corp. in its development of the Kensington hard rock mine and mill 45 miles north of Juneau.

Coeur has permit applications pending with state and federal regulators to build an underground mine and mill facility, which would produce an estimated 100,000 ounces of gold each year. The company's current estimated cost for construction is $85 million, according to Coeur's website describing its final updated feasibility results for the project. A final supplemental environmental impact statement for Kensington, along with authorizing permits, is scheduled for release Oct. 29 according to the U.S. Forest Service, the lead regulatory agency for the project. Coeur anticipates construction starting late this year, with completion and gold production expected in 2006.

"They have the capital to do the entire project — the only reason they came to us is for the potential that the tax-exempt bonds provide lower cost funds than the company's internal funding." **—Jim McMillan, AIDEA's deputy director of credit and business development**


COURTESY COEUR D'ALENE MINES

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

AIDEA's due diligence and bonding approval may not be completed before construction begins, noted Jim McMillan, AIDEA's deputy director of credit and business development.

"This does not preclude Coeur starting construction of the project themselves, and using our money in the form of the tax exempt bonds for reimbursement for some of the costs," McMillan said. "They have the capital to do the entire project — the only reason they came to us is for the potential that the tax-exempt bonds provide lower cost funds than the company's internal funding."

Bonds for port and tailings storage

AIDEA bonds may be used to construct port facilities, providing coastal access for the Southeast Alaska project. Those bonds require government ownership and availability of public use to meet Internal Revenue Service tax-free status, McMillan said. Coeur's current development plans call for port facilities at Cascade Point and Slate Creek Cove, about five miles from the proposed mill site. A marine terminal to receive supplies and to ship ore would be constructed in Slate Creek Cove off of Berners Bay.

Employees will be transported to the mine via ferry from Cascade Point, near the northern end of the Juneau Veterans Memorial Highway. Coeur plans daily bus service between Cascade Point and Juneau, eliminating on-site employee housing in camp facilities.

AIDEA bonds may also be used in constructing the mine's tailings impoundment. Because the tailings facility would be regulated under the state's solid waste disposal permits, tax-exempt bonds could be used without AIDEA ownership, according to Becky Gay, AIDEA spokeswoman.

Coeur plans to store tailings in waters of Lower Slate Lake, keeping a minimum of nine feet of water over the highest level of rock. That, combined with planned tailings dam raises, will ultimately create a larger lake and more habitat for wildlife, Gay said. Tailings will be transported from the mill to the lake via a 3.5 mile buried pipeline.

Reimbursable agreement needed

Now that the Legislature and the governor have signed off on the bonding proposal, AIDEA has begun the process of approval.

In addition to seeking a letter regarding the IRS ruling on whether tax-exempt bonds can be issued, AIDEA is seeking a cost reimbursable agreement with Coeur. That will require the mining company to pay for AIDEA's costs incurred in the bonding approval process, McMillan said, which will cover the state's due diligence review of the project.

"We contract with third party consultants to do that (due diligence)," he said. "If the bonds are issued, that cost is covered by the bonds. But if they do not go forward with the bonds, (Coeur) will pay back our expenses."

Kensington project details

Coeur plans to build a hard rock mill and administration facilities in the Johnson Creek drainage, in the vicinity of the Jualin Mine, which is a little more than two miles south of the Kensington deposit.

A 12,000-foot tunnel connecting the Jualin and the Kensington mineralized areas is also proposed, allowing milling facilities to be located further inland, out of view of Lynn Canal. The Kensington Gold Project will create 300 construction jobs and will provide an annual estimated payroll and benefits of about $16 million. The project will also create more than 181 additional indirect jobs and result in $7.5 million in direct local purchases during construction, according to Coeur.

Reserves for Kensington are estimated at one million ounces of gold.

There are an additional 7.2 million tons of mineralized material, averaging .12 ounces of gold per ton of rock. "Not all Kensington ore zones have been fully delineated at depth and several peripheral zones and veins remain to be explored," Coeur said on its website project description. "Coeur still views its interests in the district as holding up to five million ounces of gold."

Cash costs to produce gold at Kensington are estimated at $195 per ounce, a ccording to the company's final updated feasibility results. The expected mine life is approximately 10 years, for the initial one million ounces of reserves. ●

Companies involved in Alaska and northern Canada's mining industry

AeroMap U.S.
Anchorage, Alaska
Contact: Holly Holmes, Marketing
Phone: (907) 272-4495
Fax: (907) 274-3265
Email: hholmes@aeromap.com
Web site: www.aeromap.com
AeroMap provides geospatial information about the earth utilizing land, airborne and satellite sensors.

Arctic Controls
Anchorage, Alaska
Contact: Scott Stewart, president
Phone: (907) 277-7555
Fax: (907) 277-9295
Email: sstewart@arcticcontrols.com
Web site: www.arcticcontrols.com
Arctic Controls has been highly successful as manufacturer representatives in the Process Control and Instrumentation field.

Arctic Foundations
Anchorage, Alaska
Contact: Ed Yarmak
Phone: (907) 562-2741
Fax: (907) 562-0153
Email: info@arcticfoundations.com
Web site: www.arcticfoundations.com
Soil stabilization – frozen barrier and frozen core dams. Foundations – maintain permafrost for durable high capacity foundations.

Capital Office Systems
Anchorage, Alaska
Contact: Leslye Langla
Phone: (907) 777-1501
Fax: (907) 777-1515
Email: llangla@capital-office.com
Asset management, systems furniture, project coordination, space planning, systems delivery/installation, furniture refurbishing, and relocation/remodel services.

Chiulista Camp Services
Anchorage, Alaska
Contact: George B. Gardner
Phone: (907) 278-2208
Fax: (907) 677-7261
Email: ggardner@calistacorp.com
The 100 percent Alaska Native owned and operated catering company on the North Slope, catering and housekeeping to your tastes.

CN Aquatrain
Anchorage, Alaska
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.

Golder Associates
Anchorage, Alaska
Contact: Bob Dugan, mgr.
Phone: (907) 344-6001
Fax: (907) 344-6011
Website: www.golder.com
Providing geotechnical engineering, water resource, and geosciences services in support of resource development projects in Alaska and the Arctic.

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

Lynden
Anchorage, Alaska
Contact: Jeanine St. John
Phone: (907) 245-1544
Fax: (907) 245-1744
Email: custsvc@lynden.com
Web site: www.lynden.com
Truckload highway connections, scheduled barges, intermodal bulk chemical hauls, air freighters, domestic and international air and sea forwarding

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

Northern Air Cargo
Anchorage, Alaska
Contact: Nick Karnos
Phone: (907) 249-5161
Fax: (907) 249-5194
Email: nkarnos@nac.aero
Web site: www.nac.aero
NAC moves nearly 100 million pounds of cargo on scheduled flights to 17 of Alaska's busiest airports.

Totem Equipment & Supply
Anchorage, Alaska
Contact: Mike Huston, vp
Phone: (907) 276-2858
Fax: (907) 258-4623
Email: sales@toteminc.com
Web site: www.toteminc.com
Totem Equipment & Supply supplies light, medium and heavy equipment. Specializing in temporary and permanent heating solutions.

BRITISH COLUMBIA

B.C. mining industry poised for next boom, says PricewaterhouseCoopers' study

British Columbia's mining sector continued its five-year recovery trend last year and is on the brink of an Asia-fueled boom, according to an annual British Columbia mining study conducted by PricewaterhouseCoopers.

An increase in coal, copper, silver, gold and lead prices helped to push total industry net income up 166 percent in 2003, reported the study, which was released in May.

The Mining Industry in British Columbia — 2003, an annual survey and assessment of the mining industry's overall performance, summarized the 2003 year-over-year financial information of British Columbia's 13 producing mines and one smelter. It reported that the industry had a net income of C$285 million compared with C$107 million in 2002.

Gross mining revenues were up by 3.5 percent to C$3.65 billion in 2003 over the 2002 figure of C$3.53 billion. Coal was the biggest player last year, accounting for 36 percent or $964 million of the British Columbia mining industry's net revenues of $2.7 billion.

PricewaterhouseCoopers survey results found that cash flow from operations in 2003 was C$598 million, an increase of C$31 million or 5 percent from the C$567 million cash flow from operations in 2002. And last year's return on shareholder investment was 10.9 percent as compared to 4.1 percent reported in 2002.

Tempered by stronger Canadian dollar

"Although 2003 was generally a positive year for the B.C. mining industry, the benefits of higher metals prices were tempered somewhat by the stronger Canadian dollar," said Michael Cinnamond, senior manager for PricewaterhouseCoopers' British Columbia mining practice. "The global industry prices its products in U.S. dollars, so a 1 cent change in the value of the Canadian dollar translates to a shift in gross revenues for B.C. producers of C$26 million."

"The province's mining industry seems to be finding its feet after some tough years — higher metals prices are certainly helping and may lead to the re-opening of some existing mines. Exploration expenditures, a must for long-term sustainability, were up last year and reached C$55 million province-wide and are expected to be in the C$100 million range in 2004," said John Bowles, PricewaterhouseCoopers' British Columbia mining practice leader.

Exploration spending has been on the rise every year since 1999. If it breaks the C$100 million mark this year it will be the first time since 1996. Between 1980 and 1990, when 23 mines opened in the province, an average C$162 million was spent on exploration in the province each year, he said.

Provincial minister of state for mining Pat Bell told the Globe and Mail that it is important to move quickly to find and develop new mineral deposits while demand from China and India is at its peak.

"We're sitting on a 15-year window of opportunity that many of us may never see again," he was quoted as saying.

—MINING NEWS

EASTERN INTERIOR ALASKA

Freegold buys Tolovana gold project

Freegold Ventures Ltd. said June 16 it has entered into an agreement with Nautilus Alaska Inc. that allows it to acquire Nautilus's rights to a 20 year lease on the Tolovana Gold property in the Fairbanks mining district of eastern Interior Alaska. The lease may be extended for an additional 10 years on the same terms, Freegold said.

The Tolovana Gold property lies southwest of the historic Cleary Hill Mine and will form part of the Golden Summit property under the Freegold/Meridian Joint Venture, Freegold said.

Previous drilling on the Tolovana property "intersected high grade gold values in intrusive and associated metamorphic rocks. An extensive hydrothermal system is present on the property with mineralization open to the east, west and to depth," Freegold said.

Exploration is expected to begin within the next month.

Under the terms of the agreement Freegold will assume all of Nautilus's obligations under the lease, which include making annual payments of $1,000 per month for first 23 months, increasing to $1,250 per month for months 24 to 48, and increasing to $1,500 after the 49th month and for duration of the lease, Freegold said.

The property is subject to a sliding scale NSR as follows: 1.5 percent NSR if gold is below $300, in the event the price of gold is between $300-$400 a 2.0 percent NSR is in effect.

In the event that the price of gold is above $400, the property is subject to a 3.0 percent NSR.

In addition, Freegold made a payment of $7,500 on signing and will issue 400,000 shares on regulatory approval and an additional 200,000 shares within 30 days of a minimum 200,000 ounce mineral resource being calculated on property. This clause is in effect for a period of five years from the date of the agreement, Freegold said.

The agreement is subject to regulatory approval.

Cleary Hill results

Freegold and joint venture partner Meridian Gold Inc. expect to have the final check assays and metallic screen assays from drilling in the Cleary Hill Mine area in the next week, Freegold said June 16.

The six holes were aimed to "intersect the down dip extension" of the Cleary Hill Mine.

● CHANDALAR, ALASKA

Little Squaw releases independent report

Geological analysis suggests potential bulk tonnage deposit, placer mining opportunities on far northern Alaska property

By PATRICIA LILES
Mining News Editor

Little Squaw Gold Mining Co. released results in early May from an independent geological analysis of the company's holdings in the Chandalar Mining district, which include both lode and placer prospects.

Recommendations for future lode exploration includes targeting a potential bulk tonnage deposit, based on including lenses of multi-ounce gold quartz veins with auriferous splays and subparallel, sheeted quartz vein systems.

Placer development recommendations suggest targets in the lower Big Squaw Creek and the Little Squaw Creek valleys, which could contain up to 300,000 ounces of gold, according to the company's May 3 press release.

Little Squaw commissioned Pacific Rim Geological Consultants Inc., of Fairbanks, to analyze the historical database for the Chandalar area property and to complete an independent report and recommendation. Pacific Rim's report "offers a scientific basis

> *"The long-term key to the economic success of the Chandalar mines is going to be realization of road access. The most practical route for consideration is the 61-mile long Coldfoot to Chandalar Lake winter trail."* **—Richard Walters, president, Little Squaw Gold Mining**

that verifies the high quality of its Chandalar property as an exploratory gold prospect that could well contain a major gold deposit," Little Squaw said in its press release.

Richard Walters, president of the recently reorganized company, said current plans for the Chandalar property in 2004 will be minimal, "nothing more than claim maintenance this summer — that is unless we accomplish an equity financing (private or public) or secure a joint venture partner (one of the big gold companies)."

Little Squaw is working on both options, he added, and has been in serious discussions with two majors. Walters put together a deal last summer to acquire the Chandalar mining district property, with the intention of putting Little Squaw's gold holdings back into production. Little Squaw holds about 8,200 acres of mining claims on state land, and 425 acres of patented federal land, which covers the main gold-quartz lodes and the principle placer deposit. About 13.4 square miles of land is staked in the district, mostly north and east of Chandalar Lake.

Seeking winter trail upgrade to road

Access is by air or by winter trail, from the Dalton Highway east to Chandalar, a route over which the state has announced its intent to file a quiet title action for the unencumbered right of way, Walters said.

The big story is that the RST 2477 trail from Coldfoot into Chandalar (No. 009) is number one on the state's list for road development, Walters said.

"The long-term key to the economic success of the Chandalar mines is going to be realization of road access. The most practical route for consideration is the 61-mile long Coldfoot to Chandalar Lake winter trail."

Connecting with the Dalton Highway would open up already platted subdivisions and trade and manufacturing sites around Chandalar Lake to development, he added.

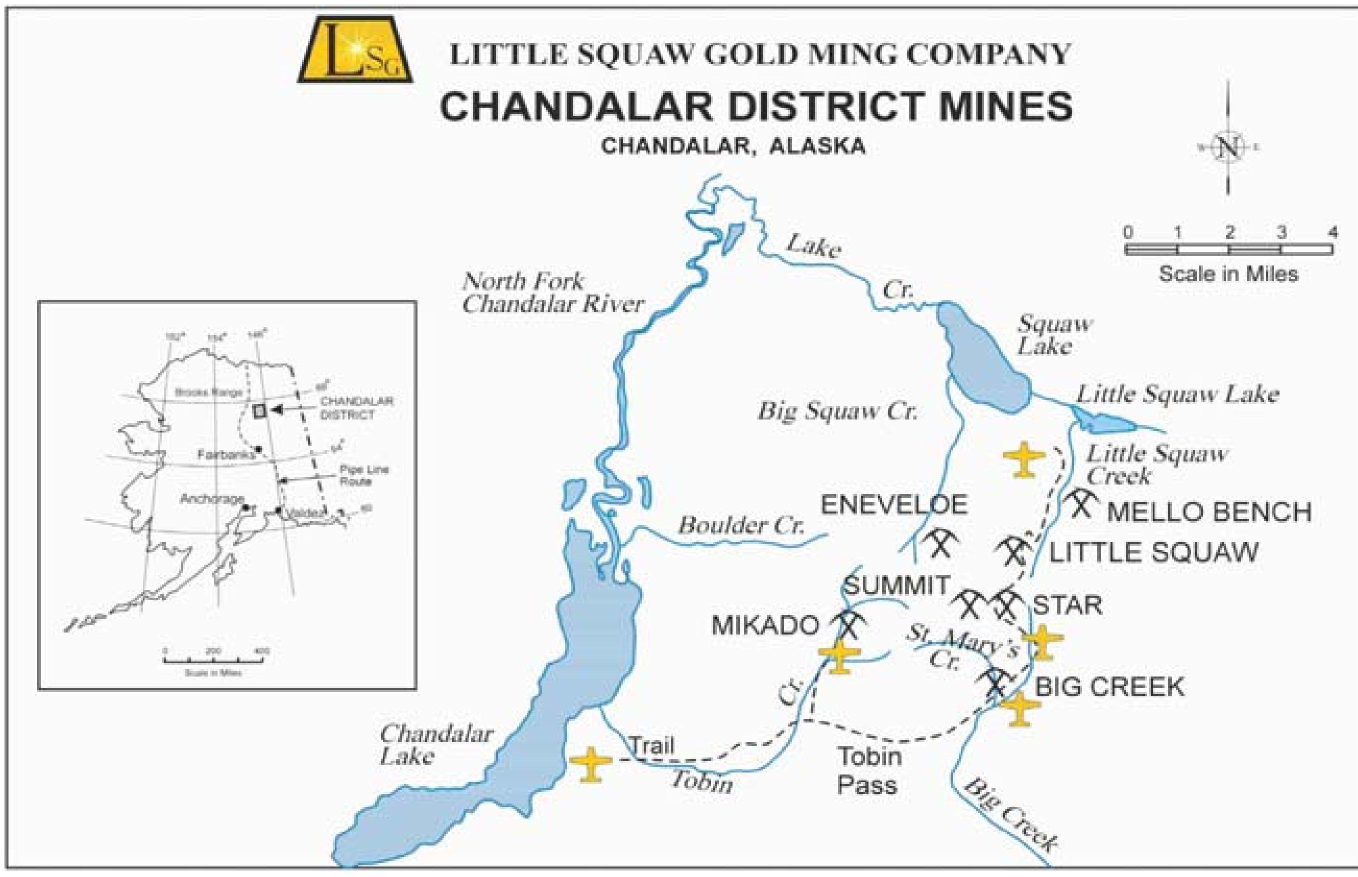
The trail crosses no conservation units, staying mostly on state and state-selected lands. Heavy mining equipment has been freighted over the route since the late 1950s, and Little Squaw has requested the state provide funds for an engineering study of a pioneer gravel road.

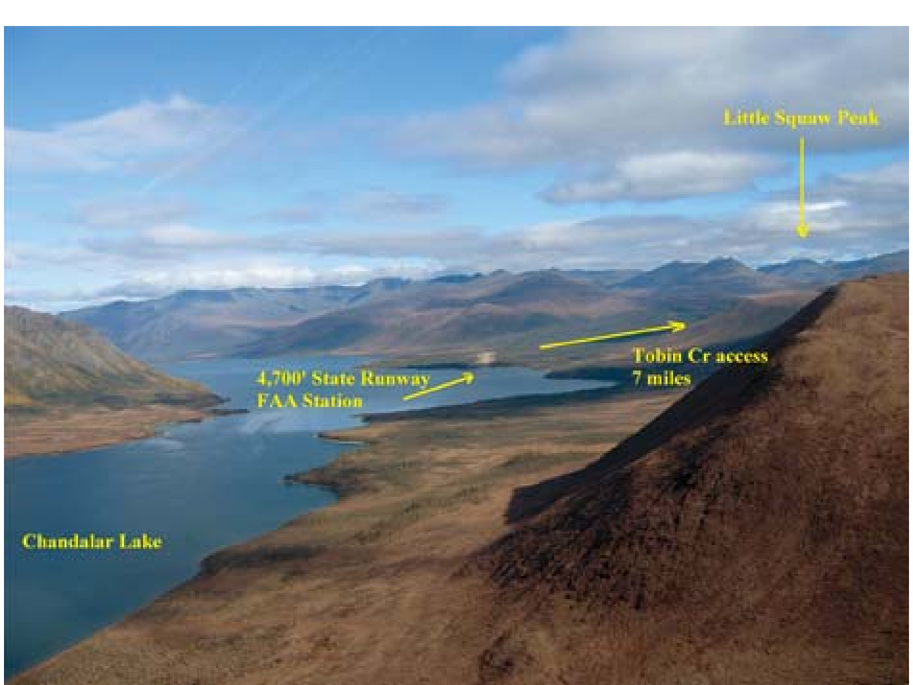
Technical report released

Pacific Rim's report is the first ever analytical independent technical report conducted on the property and the mining district, according to Walters.

Consultants Thomas Bundtzen and James Barker reviewed historical data to produce their analysis. Little Squaw's lode gold mineralization is "orogenic, mesothermal, low-sulfide deposits hosted in shear zones that have strike lengths of at least four

see LITTLE SQUAW page 16





continued from page 15

LITTLE SQUAW

miles, widths of up to 400 feet and vertical extents of at least 1,600 feet," according to the report.

"There are at least four, parallel, quartz-sulfide-vein-and-shear zone structures that control the past productive Mikado, Eneveloe, Summit and Little Squaw gold deposits, and more than 20 additional lode gold prospects, the latter of which have received very little exploration work."

The report also analyzed placer occurrences on the property, recommending development of a gold placer operation capable of producing 15,000 to 25,000 ounces of gold per year. The authors recommend an initial $1.5 million work program that would jointly target a first-phase appraisal of both placer and lode deposits.

Potential exploration prospects are numerous on the property, where gold was first discovered on Little Squaw Creek in 1905. Past production in the district exceeded 84,000 ounces, Walters said. Identified lode gold resources are more than 17,000 tons, with an average grade of 1.5 ounce per ton, for 26,493 ounces of gold.

Walters estimates there is "near-surface potential for more than one half million ounces of high grade on the six main structures, as well as multi-million ounce potential that could come with deep exploration of them and some nine other known veins." ●

● FAIRBANKS, ALASKA

Exploration, placer mining activity up

Permits sought by exploration, placer mining operators increase by 43 compared to 2003, state geologist predicts 17% increase

By PATRICIA LILES
Mining News Editor

Placer mining and lode exploration activity in Alaska is picking up this year, according to applications filed with the Alaska Department of Natural Resources.

A total of 299 permit applications have been filed with the department's Division of Mining, Land and Water in 2004, an increase of 43 applications compared to the number filed in 2003, according to geologist Brent Martellaro, in the department's Northern Regional office in Fairbanks.

"We're projecting (the number of permits filed) it will be 17 percent higher. We're on target to see about 360 applications by the end of the year," Martellaro told Mining News on June 7.

Placer miners and hard rock exploration companies using heavy-duty equipment must complete an annual placer mining application to receive permission from the state for their activities. Exploration activity that does not use heavy equipment, such as soil sampling, geophysical surveys or even suction dredging, does not require the annual permit.

The one year permit cost is $100, although companies can file multi-year applications for ongoing programs, for up to five years. Multi-year applicants pay a $100 fee the first year, then $50 for each subsequent year.

Many more people mining this year

The recent increase in annual applications doesn't fully reflect the increased activity on Alaska's mineral prospects, Martellaro said.

"Last year, a lot of people were just treading water — continuing to submit their application but not actively mining. This year, there are many more people planning to do some serious mining."

In addition, the increase in applications is accompanied by a number of new operators submitting plans, Martellaro said.

> *"Last year, a lot of people were just treading water — continuing to submit their application but not actively mining. This year, there are many more people planning to do some serious mining."*
> **—Brent Martellaro, geologist with Alaska Department of Natural Resources, Division of Mining, Land and Water**

"It's encouraging that things are picking up for some people," he said. "Hopefully gold prices will stay in there."

Placer mining in Alaska has dropped substantially in recent years, mostly due to falling gold prices in the late 1990s and early 2000. In 1993, 196 placer mines and one lode mine produced 191,265 ounces of gold, worth $68 million, according to the 1994 Alaska Mineral Industry report. In 2002, three large hard rock mines and about 50 placer mines produced 562,094 ounces of gold in Alaska, worth $174.3 million.

Claim staking up dramatically

A precursor to exploration and mining activity is claim staking, and the department reported dramatic increases earlier this year, work that began in earnest in 2003 and continued into early 2004.

Hot spots for claim staking included the Pogo area northeast of Delta Junction in Alaska's Interior, the Denali block just north of the Alaska Range near Paxson and the Pebble area, northwest of Iliamna on the Alaska Peninsula in Southcentral Alaska.

Department records indicate those three lode prospecting areas make up 903,240 acres of active claims, equal to 1,411.3 square miles of ground. That's roughly one-third of the total amount of land in Alaska staked for mineral exploration and development.

In 2003, 507 square miles of state and federal land were staked, about double the amount of claim staking in 2002. (See April 18 issue of Mining News.) ●