Petroleum news

Vol. 20, No. 31 • www.PetroleumNews.com | *A weekly oil & gas newspaper based in Anchorage, Alaska* | Week of August 2, 2015 • $2.50

page 5 Q&A: Navarre preps borough for AKLNG project, pipeline role

This week's Mining News

NORTH OF 60 MINING news

page 10 Australian junior makes bid for Yukon Zinc's closed mine

www.MiningNewsNorth.com | *The weekly mining newspaper for Alaska and Canada's North* | Week of August 2, 2015

NEWS NUGGETS

Compiled by Shane Lasley

Millrock cuts deal for Pogo area assets

Millrock Resources Inc. July 29 reported that it has struck a deal with Corvus Gold Inc. to purchase Raven Gold Alaska LLC's assets located in or pertaining to the Goodpaster Mining District of Interior Alaska. As part of the agreement, Millrock has purchased the West Pogo gold property from the Corvus subsidiary. The West Pogo claims cover the projection of a favorable structure that passes through Sumitomo Metal Mining Co.'s Pogo Mine., located about two miles to the southwest. Millrock paid US$20,000 for a 100 percent interest in West Pogo, with Raven retaining a royalty of 3 percent net smelter return royalty on precious metals and 1 percent NSR on base metals. Millrock may reduce the precious metals royalty to 1 percent by making payments totaling US$7 million. Per the terms of a collaboration agreement signed with an unnamed major mining company earlier in 2015, Millrock will offer the major the opportunity to assign West Pogo to "designated project" status, subject to an option agreement with pre-determined terms. With funding from its strategic partner, Millrock also has purchased an extensive, proprietary database of geological information from Raven. The database was created through more than US$5 million of exploration completed by Anglogold-Ashanti and International Tower Hill Mines in the 1990s and early 2000s and contains information from throughout Alaska's Goodpaster Mining District and the Pogo Mine area. Included in the information are geochemical results for thousands of stream sediment, soil, rock and vegetation samples, airborne geophysical surveys, structural and remote sensing analyses and project generation reports. The purchase price for the database is US$100,000. A royalty of 1 percent NSR in favor of Raven will be payable for any claims staked by Millrock within a defined area of interest in the next five years. The royalty may be reduced to 0.5 percent by payment of US$2 million. Corvus also has granted Millrock a right of first refusal to acquire the LMS project, another venture in the Pogo area, under agreed upon terms until Sept. 1. Millrock Chief Exploration Officer Philip St. George said, "With the acquisition of the Anglogold-Ashanti database, our company will have the most comprehensive store of geological knowledge on this district. We will have a distinct com-

see **NEWS NUGGETS** page 10

EXPLORATION

Perseverance pays off

Kiska finds new buyer for Whistler, focuses on larger copper-gold portfolio

By SHANE LASLEY

Mining News

Less than three months after a pending sale of its Whistler property in Southcentral Alaska fell through, Kiska Metals Corp. has found a new buyer for the advanced-stage copper-gold exploration project.

Under a binding agreement announced last week, Brazil Resources Inc. will issue Kiska 3.5 million shares in exchange for full ownership of Whistler, including the mining claims and other assets belonging to the project.

Brazil Resources' shares were trading at C46 cents per share on the Toronto Venture Exchange on July 21, making the deal worth roughly C$1.61 million at the signing of the agreement.

"This transaction greatly increases the company's flexibility going forward," said Kiska President Grant Ewing. "Kiska will no longer incur any holding or exploration costs, and it retains excellent carried participation in the future upside of the Whistler Project and other projects through its shareholding in BRI."

With the Whistler property and associated costs shifted out of its portfolio, the prospect generator can now focus more attention on its primary strategy of securing and fostering partnerships for the numerous other copper and gold projects it has generated, including its Copper Joe project in Alaska and Kliyul porphyry project in north-central British Columbia.

"Kiska continues to execute the prospect generator business model by having top-tier mining companies drill and explore our projects this season, such as Kliyul and Copper Joe," said Ewing.

Re-examining Whistler

The Whistler property blankets roughly 65 square miles of gold-copper prospective lands in the Kahiltna Terrane region of Southcentral Alaska.

SHANE LASLEY

Drilling has cut two distinct gold-copper zones at the Island Mountain deposit located in the southern half of the 65-square-mile Whistler property in Southcentral Alaska.

This large land package is anchored by its namesake deposit, which hosts 79.2 million metric tons of indicated resource grading 0.51 grams per metric ton gold, 1.97 g/t silver and 0.17 percent copper; and 145.8 million metric tons of inferred resource averaging 0.40 g/t gold, 1.75 g/t silver and 0.15 percent copper.

Brazil Resources is considering this resource for Whistler as historical until an independent qualified person re-examines the parameters of the work used to calculate the 2011 resource and issues a new estimate for the Whistler deposit that reflects current metal prices.

Roughly 20 other prospects and deposits have been identified across the wider Whistler property, including those found at Whistler orbit, Island Mountain and Muddy Creek.

The Whistler orbit is a roughly 20-square-mile

see **WHISTLER BUYER** page 11

Kiska Metals Corp. finds new buyer for Whistler, focuses on larger copper-gold portfolio. Read more in Mining News, page 9.

Shell drillships are in Chukchi

Shell's drilling vessels, the Noble Discoverer and the Transocean Polar Pioneer, have reached the area of the Chukchi Sea where Shell plans to conduct exploratory drilling, company spokeswoman Megan Baldino told Petroleum News July 28.

Shell has previously said that it plans to start its drilling campaign with the Burger J well in the Burger prospect. The prospect, about 70 miles northwest of the Chukchi Sea coastal

see **DRILLING FLEET** page 20

Kitchen Lights still on target

Furie Operating Alaska's Kitchen Lights gas field development offshore in Cook Inlet continues to move forward. The laying of the gas pipeline from the field's offshore platform has been completed, with the pipe-laying barge stationed in Anchorage, preparing to depart for Seattle, Bruce Webb, Furie senior vice president, told Petroleum News in a July 27 email. Webb said that the onshore facility where gas will be processed for delivery into the Kenai Peninsula has also been completed, with work associ-

see **KITCHEN LIGHTS** page 18

Chugach gas contract extended

After years of concern that Cook Inlet's natural gas supplies might dry up and imports could be required, further evidence has surfaced that Hilcorp Alaska's development program in the basin is paying off, with Chugach Electric Association applying to extend its natural gas sale and purchase agreement with Hilcorp Alaska by four years.

Key provisions of a tariff amendment filing by Chugach with the Regulatory Commission of Alaska include: extending

see **GAS CONTRACT** page 15

NATURAL GAS

A critical step

BP asks AOGCC permission to up Prudhoe gas offtake for major gas sales

By ALAN BAILEY

Petroleum News

A July 17 application by BP to the Alaska Oil and Gas Conservation Commission for amendments to area injection orders for the Prudhoe Bay field marks a critical step toward the possibility of building a major gas pipeline for the export of natural gas from the North Slope. The application requests approval for an increase in the maximum amount of gas that can be withdrawn from the field and approval to inject additional carbon dioxide into the field reservoir.

Although huge quantities of natural gas have been produced from the Prudhoe Bay field along with oil over the years, most of that gas has been reinjected into the field's reservoir to help maximize oil production. The gas is used both to help maintain the fluid pressure in the reservoir and, mixed with natural gas liquids, to flush oil from the rock pores.

BP says that it has upgraded its field model for the Prudhoe Bay field since the AOGCC last considered the gas offtake limit for the field in 2007.

With oil having a higher market value than natural gas, the AOGCC has capped the amount of gas that can be removed from the field, with the agency favoring the use of gas for enhanced oil recovery. To obtain approval for an increased gas offtake, the

see **GAS OFFTAKE** page 18

FINANCE & ECONOMY

CPAI selling CI assets

Conoco selling North Cook Inlet, Beluga River interests to focus on NS, AKLNG

By ERIC LIDJI

For Petroleum News

ConocoPhillips Alaska Inc. is selling its Cook Inlet properties.

The largest oil company in the state said it expects to open a data room in August to market its wholly owned North Cook Inlet unit and its stake of the Beluga River unit.

"While historically significant to the company's investment in Alaska, the North Cook Inlet and Beluga River units are mature fields that are no longer considered core to Alaska operations. The focus will be on the company's current North Slope operations, including the Alaska LNG project," the company said in a statement on July 28.

The company said it intends to keep its liquefied natural gas terminal in Kenai.

The company said it intends to keep its liquefied natural gas terminal in Kenai.

The announcement is the second time in as many years that a major Alaska oil company has limited its focus in the state. In late 2014, Hilcorp Alaska LLC closed on the acquisition of four BP Exploration (Alaska) Inc. properties on the North Slope, which

see **CONOCO ASSETS** page 18

NATURAL GAS

LNG clears tax hurdle

BC Legislature ratifies Pacific NorthWest tax package; environmental OK needed

By GARY PARK

For Petroleum News

CHRISTY CLARK

The British Columbia government has locked in a tax regime for the liquefied natural gas industry, certain it has won on both the economic and political fronts.

But the administration of Premier Christy Clark continues to face friendly fire from with its own Liberal party and the industry.

Clark wrapped up a special session of the provincial legislature by rating the 25-year project development agreement with Pacific NorthWest LNG, operated by Malaysia's Petronas, as a "historic milestone." But the joint consortium has yet to make a final investment decision on the C$36 billion project.

"People will look back on this debate and see who stood where on what," she said. "Who had the long sight, the foresight, the vision to build something, to undertake something people said wouldn't be possible."

The bill, passed by 43 votes to 28, protects Pacific NorthWest and any other LNG proponents from tax increases specifically targeted at LNG.

Finance Minister Mike de Jong, who steered the legislation through the extraordinary summer ses-

see **LNG HURDLE** page 19

contents

Petroleum News *North America's source for oil and gas news*

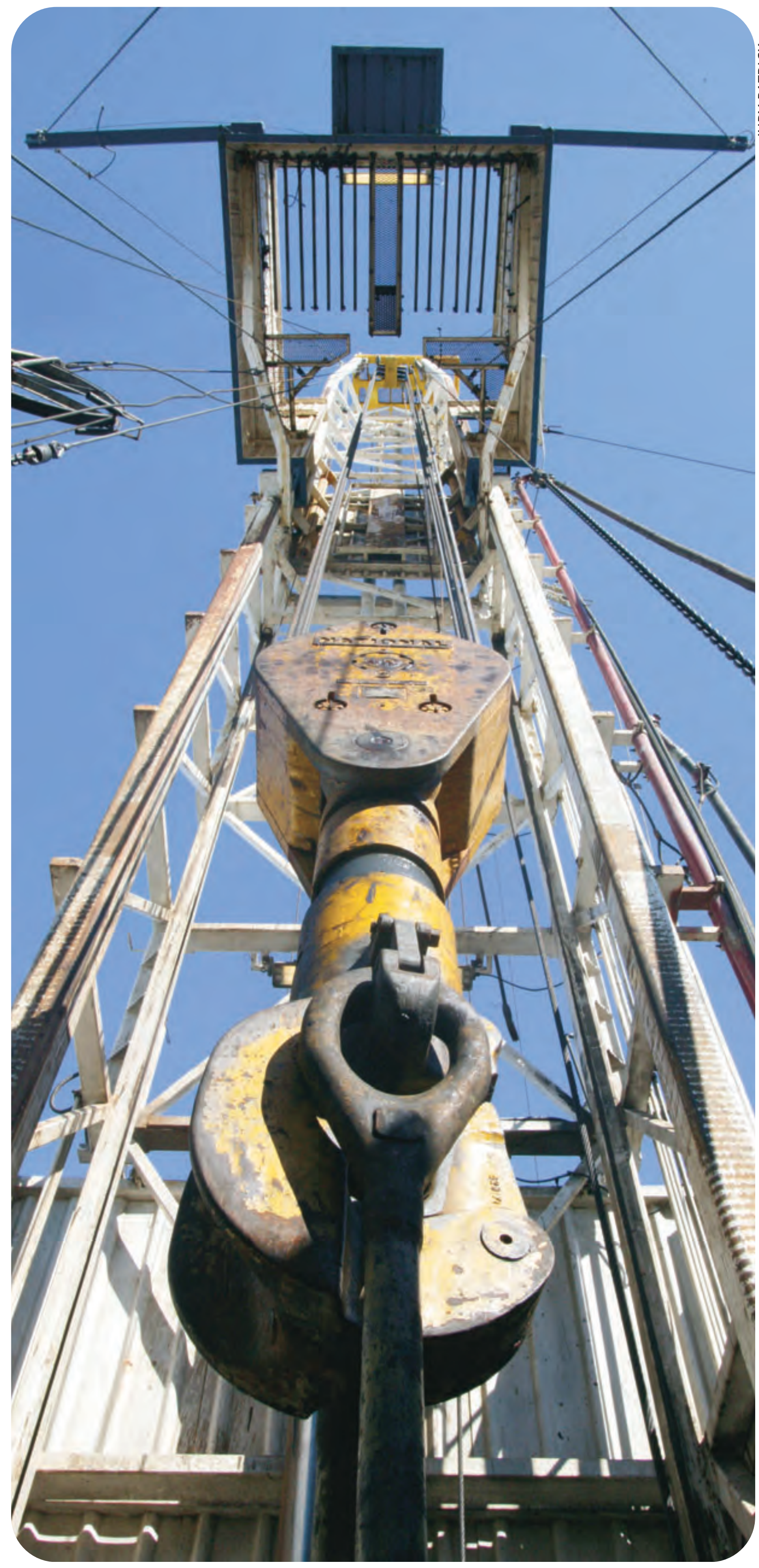
Alaska - Mackenzie Rig Report

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)	Prudhoe Bay, Maintenance	BP
Dreco 1000 UE	16 (SCR/TD)	Prudhoe Bay PBU X-17	BP
Dreco D2000 Uebd	19 (SCR/TD)	Nanuq CD5-313	ConocoPhillips
AC Mobile	25	Kuparuk 1D-145	ConocoPhillips
OIME 2000	141 (SCR/TD)	Kuparuk 2S-07	ConocoPhillips
TSM 7000	Arctic Fox #1	Stacked	
Kuukpik	5	Prudhoe Bay	Available
Nabors Alaska Drilling			
AC Coil Hybrid	CDR-2	Kuparuk 2F-18	ConocoPhillips
Dreco 1000 UE	2-ES (SCR-TD)	Nabors yards completing demobilization procedures	
Mid-Continental U36A	3-S	Prudhoe Bay	Available
Oilwell 700 E	4-ES (SCR)	Prudhoe Bay	Available
Dreco 1000 UE	7-ES (SCR/TD)	Kuparuk	ConocoPhillips
Dreco 1000 UE	9-ES (SCR/TD)	Kuparuk	ConocoPhillips
Oilwell 2000 Hercules	14-E (SCR)	Prudhoe Bay	Available
Oilwell 2000 Hercules	16-E (SCR/TD)	Mustang location, Under contract to Brooks Range Petroleum	Brooks Range Petroleum
Emsco Electro-hoist-2	18-E (SCR)	Prudhoe Bay	Stacked
Emsco Electro-hoist Varco TDS3	22-E (SCR/TD)	Prudhoe Bay	Stacked
Emsco Electro-hoist Canrig 1050E	27-E (SCR-TD)	Deadhorse, under contract to ExxonMobil for 2015	
Emsco Electro-hoist	28-E (SCR)	Prudhoe Bay	Stacked
Oilwell 2000	33-E	Prudhoe Bay	Available
Academy AC Electric CANRIG	99AC (AC-TD)	Nabors yards completing demobilization procedures	
OIME 2000	245-E (SCR-ACTD)	Oliktok Point	ENI
Academy AC electric CANRIG	105AC (AC-TD)	Nabors yards completing demobilization procedures	
Academy AC electric Heli-Rig	106-E (AC-TD)	Deadhorse Nabors yard	Available
Nordic Calista Services			
Superior 700 UE	1 (SCR/CTD)	Prudhoe Bay Drill Site Z-15	BP
Superior 700 UE	2 (SCR/CTD)	Prudhoe Bay on Price Pad conducting Rig Maintenance	BP
Ideco 900	3 (SCR/TD)	Milne Point MP-L Pad, Well 49	Hilcorp
Parker Drilling Arctic Operating Inc.			
NOV ADS-10SD	272	Prudhoe Bay DS 18	BP
NOV ADS-10SD	273	Prudhoe Bay DSW-59	BP
North Slope - Offshore			
BP			
Top Drive, supersized	Liberty rig	Inactive	BP
Doyon Drilling			
Sky top Brewster NE-12	15 (SCR/TD)	Spy Island SP01-SE7 L1	ENI
Nabors Alaska Drilling			
OIME 1000	19AC (AC-TD)	Oooguruk ODSN-02	Caelus Alaska
Cook Inlet Basin – Onshore			
Miller Energy Resources			
Mesa 1000	Rig 37	Mobilized to North Fork to begin drilling this winter	Miller Energy Resources
All American Oilfield LLC			
IDECO H-37	AAO 111	In All American Oilfield's yard in Kenai, Alaska	Available
Aurora Well Services			
Franks 300 Srs. Explorer III	AWS 1	Sterling, Stacked out at D&D yard	Available
Nabors Alaska Drilling			
Continental Emsco E3000	273E	Kenai	Available
Franks	26	Kenai	Stacked
IDECO 2100 E	429E (SCR)	Kenai	Stacked
Saxon			
TSM-850	147	Ninilchik Unit, Bartolowits pad drilling Frances #1	Hilcorp Alaska
TSM-850	169	Swanson River	Hilcorp Alaska
Cook Inlet Basin – Offshore			
XTO Energy			
National 110	C (TD)	Idle	XTO
Spartan Drilling			
Baker Marine ILC-Skidoff, jack-up		Spartan 151 Upper Cook Inlet KLU#1	Furie
Cook Inlet Energy			
National 1320	35	Osprey Platform RU-1, workover	Cook Inlet Energy
Patterson UTI Drilling Co LLC	191	West McArthur River Unit #8	Cook Inlet Energy
Mackenzie Rig Status			
Canadian Beaufort Sea			
SDC Drilling Inc.			
SSDC CANMAR Island Rig #2	SDC	Set down at Roland Bay	Available
Central Mackenzie Valley			
Akita			
TSM-7000	37	Racked in Norman Well, NT	Available

The Alaska - Mackenzie Rig Report as of August 2, 2015. 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 Marti Reeve



JUDY PATRICK

Baker Hughes North America rotary rig counts*

	July 24	July 17	Year Ago
US	876	857	1,883
Canada	200	192	395
Gulf	31	31	59

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

The Alaska - Mackenzie Rig Report is sponsored by:

● EXPLORATION & PRODUCTION

New finds on west side of Cook Inlet

DGGS-led team assesses oil reservoir potential of rocks exposed in Iniskin Peninsula area opposite Kachemak Bay & Anchor Point

By ALAN BAILEY
Petroleum News

Having indications of a petroleum system and being the site of some exploration drilling in the early 1900s, the Iniskin Peninsula on the west side of Alaska's Cook Inlet has long intrigued oil explorers. And, as part of a multi-year program of research into the geology of Cook Inlet, led by Alaska's Division of Geological and Geophysical Services, a team of geologists has been conducting field studies in and to the north of the peninsula. DGGS has now published the results of fieldwork that the team conducted in 2014.

The results shed some new light on the petroleum potential of rocks of Mesozoic age in the Cook Inlet basin. While all of the producing oil and gas fields of Cook Inlet have reservoirs in rocks from a younger Cenozoic sequence, geologists have speculated on the potential for finding hydrocarbons in the older Mesozoic rocks, which are generally buried deep below the prolific and shallower Cenozoic strata.

Mesozoic rocks, including the rock units that sourced the oil found in Cook Inlet oil fields, are exposed at the surface around and near the Iniskin Peninsula.

The DGGS-led research has been characterizing the petroleum potential of both the Cenozoic and Mesozoic rocks of the Cook Inlet basin. By conducting independent research and making its findings public the agency hopes to encourage oil and gas exploration in Alaska, while also providing useful data to companies interested in the potential of regions such as Cook Inlet. The work is being funded by the state of Alaska and the U.S. Geological Survey. Apache Corp. has also provided funding for the research program.

Tuxedni group

During the 2014 field season geologists examined the Red Glacier formation, a rock unit which occupies the base of the middle Jurassic Tuxedni group and which outcrops on the east side of Iliamna Volcano, to the north of the Iniskin Peninsula. Previous geochemical analysis has confirmed a view that the Red Glacier formation has been the primary source of Cook Inlet oil, the DGGS report says. In outcrop, the DGGS-led team measured a total thickness of 681 meters for the formation, although the lower 150 meters to 200 meters did not prove accessible because of steep terrain, the DGGS report says.

The lower part of the section that DGGS measured includes massive sandstone beds, with sand grains exhibiting evidence of a volcanic source. The middle part of the section includes 573 meters of laminated mudstone, with features that indicate deposition in a deep marine environment with an abundance of organic material. The rocks contain ammonite, belemnite and bivalve fossils. Sandstone dikes and sheet-like accumulations of a secondary mineral cut across the mudstone layers.

The upper part of the Red Glacier formation in the measured section consists of 41 meters of a light-brown weathered rock containing varying amounts of sand and silt.

The Gaikema sandstone, another rock formation within the Tuxedni group, directly above the Red Glacier formation, is well exposed in the northern part of the Iniskin Peninsula where it ranges in thickness from 150 to 260 meters. The rock exhibits evidence of being deposited from an ancient river delta and contains plentiful fossil fragments, the DGGS report says.

The Gaikema sandstone is of interest as a potential petroleum reservoir rock, especially given the fact that it lies directly over the Red Glacier formation, a presumed source of Cook Inlet oil. An analysis of samples of the sandstone collected from the field indicates that the rocks may have been buried in the past to depths of 4.5 to 7.7 kilometers. These findings and further investigations should provide insights into the potential of the Gaikema as an exploration target, the report says. However, initial impressions are that cementation of the sand in the rock has resulted in only minimal potential for the rock acting as a conventional hydrocarbon reservoir. But clay content in the rock could provide potential for the discovery of "tight gas," gas which is trapped within the rock lattice but which cannot readily flow, the report says.

Naknek formation

During the 2014 field season the DGGS-led team also examined surface exposures of the upper Jurassic Naknek formation, another potential Mesozoic hydrocarbon reservoir. The Naknek is well exposed along the north side of Chitina Bay, to the north of the Iniskin Peninsula. At Chitina Bay a lower sandstone unit, 317 meters

see **NEW FINDS** *page 6*

Petroleum news
www.PetroleumNews.com

Kay Cashman	PUBLISHER & EXECUTIVE EDITOR
Mary Mack	CEO & GENERAL MANAGER
Kristen Nelson	EDITOR-IN-CHIEF
Susan Crane	ADVERTISING DIRECTOR
Bonnie Yonker	AK / NATL ADVERTISING SPECIALIST
Heather Yates	BOOKKEEPER
Shane Lasley	NORTH OF 60 MINING PUBLISHER
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Alan Bailey	SENIOR STAFF WRITER
Eric Lidji	CONTRIBUTING WRITER
Wesley Loy	CONTRIBUTING WRITER
Gary Park	CONTRIBUTING WRITER (CANADA)
Steve Quinn	CONTRIBUTING WRITER
Rose Ragsdale	CONTRIBUTING WRITER
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Mapmakers Alaska	CARTOGRAPHY
Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Renee Garbutt	CIRCULATION MANAGER
Ashley Lindly	RESEARCH ASSOCIATE

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

NEWS
907.522.9469
publisher@petroleumnews.com

CIRCULATION
907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com

Bonnie Yonker • 425.483.9705
byonker@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

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

OWNER: Petroleum Newspapers of Alaska LLC (PNA)
Petroleum News (ISSN 1544-3612) • Vol. 20, No. 31 • Week of August 2, 2015
Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518
(Please mail ALL correspondence to:
P.O. Box 231647 Anchorage, AK 99523-1647)
Subscription prices in U.S. — $118.00 1 year, $216.00 2 years
Canada — $206.00 1 year, $375.00 2 years
Overseas (sent air mail) — $240.00 1 year, $436.00 2 years
"Periodicals postage paid at Anchorage, AK 99502-9986."
POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

UPDATE

AOGCC moves hearings to LIO

The Alaska Oil and Gas Conservation Commission has moved hearings scheduled for Aug. 27 and Sept. 1 from its Anchorage offices to the Anchorage Legislative Information Office at 716 W. 4th Avenue.

The Aug. 27 hearing is on a request from Prudhoe Bay unit operator BP Exploration (Alaska) that the commission authorize CO2 injection for enhanced recovery purposes and to increase the allowable gas offtake from the Prudhoe oil pool.

The Sept. 1 hearing in on a request for the establishment of pool rules governing development of the proposed Thomson oil pool by Point Thomson operator ExxonMobil Alaska Production.

Both hearings begin at 9 a.m.

In another update from the commission, an Aug. 4 hearing on an enforcement action against Cook Inlet Energy for safety valve system violations on the Sword No. 1 oil well has been cancelled and will be rescheduled.

—PETROLEUM NEWS

● GOVERNMENT

Navarre preps borough for stark change

Once a Democratic state lawmaker, now K-P mayor, Navarre says borough must brace for role in prospective pipeline, LNG project

By STEVE QUINN
For Petroleum News

Mike Navarre has two years to help the Kenai Peninsula Borough find its place and role in the prospective AKLNG project.

The Democratic mayor understands those limits, yet he says he doesn't want the borough to be caught off guard if the project gets under way when thousands of new workers descend on the Peninsula for pipeline and export facility construction.

Navarre brings two assets to the discussions: his 12 years in the Legislature and the recent hiring of former federal pipeline coordinator Larry Persily, who also had a stint as deputy Revenue commissioner.

Now in his second of two and final mayoral term, Navarre shared his thoughts on what the AKLNG project means for the borough as well as the state.

Petroleum News: What's it like to mayor of a borough that could be a national, maybe a global, focal point with a project of this size advancing?

Navarre: Well, obviously it's kind of exciting to be in the middle of it. At the same time, we are taking kind of a cautious approach with it because we are not exactly sure what's going to happen. Because of the lead times and the environmental impact statements that have to be done, we have to be ahead of it. We can't wait until the final decisions that are made in order to provide our input or a bulk of the responsibility could fall to the Kenai Peninsula Borough, the taxpayers, to take care of some things that are direct impacts from the project, if it moves forward.

So it's exciting, but we are trying not to get too hyped up about it because we know there are a couple of decision points that are still out there that have to be made. I've lived here my whole life and been through this a number of times. It feels a lot more serious than any time in the past.

Petroleum News: You've seen the benefits of resource development. What have you seen and what cautions have you extracted from any of this?

Navarre: I guess the biggest thing is that oil and gas put the Kenai Peninsula on the map. It provided a lot of economic opportunities for residents and businesses. When I was growing up here in the early '60s, we double shifted at schools because we couldn't get infrastructure in place quick enough. We saw some of the same phenomena during the pipeline construction where the economy at the time was such that the size of the project kind of overwhelmed the state. I've seen it from a couple of different aspects over the years in Alaska.

This one is certainly a mega project. It will provide lots of opportunities in Alaska and on the Kenai Peninsula, but at the same time it brings with it impacts because there will be people coming up here who anticipate taking advantage of those opportunities who don't have the skills or education, so there will be people moving up here who could be a drain on the state or the borough.

Some of the other impacts that go along with it are employment in the public and private sector sometimes gets cannibalized by major projects and we will expect that to happen. There will be impacts like that and we'll be trying to hang onto employees.

MIKE NAVARRE

Petroleum News: So how then are you preparing for this especially as project decisions are stage-gated?

Navarre: The first thing I do is go out and get some experience. I hired Larry Persily because he's got great background and experience and knowledge about the issue. We are trying to figure out what the impacts are going to be and when they are going to hit to make sure we provide information to the environmental impact statements and socio economic reports so we get impacts addressed as part of the project costs.

The other things we are in the process of working to develop is what happens if the project moves forward? Since my term ends in 2017, and since it will be future mayor, administration and assembly that will have to deal with it, what we would like to do is put together a framework for what happens if you have a significant influx of population, significant influx of revenues and how the tax structure and tax mix might be changed. So at least we start discussing some of those things so it's not a crisis situation if and when the project happens.

And it will start gearing up I think next year or the year after if they go forward with the FEED stage. We want to have a framework in place, not that it's going to be final or definitive, but it could say here are some things that need to be addressed with infrastructure short term and long term. There will be as many as 5,000 people for construction on the Kenai Peninsula at the height of the project, but we don't't want to gear up for that kind of population increase and make estimates based on that. What we want to do is address what is going to happen during construction and also how you deal with it after construction because there will be a ramp down afterward.

Petroleum News: So are you sensing any kind of buzz or is it a bit too early to detect that? If so what are you telling people?

see **NAVARRE Q&A** *page 17*

FINANCE & ECONOMY

Bankrupt oil company wants payments back

The city of Homer is filing a response to a request from an oil company seeking the return of thousands of dollars in previous payments made to businesses.

Australian company Buccaneer Oil filed for Chapter 11 bankruptcy in May of last year. The city, Homer Electric Association and several business received letters from the company's trustee saying preferential payments made to them in the 90 days before the bankruptcy filing had to be returned, the Homer News reported (http://bit.ly/1Dvx3h5).

"Can we ask for our subsidies back?" council member David Lewis said during a Homer council meeting. "This seems ridiculous. If you collect money from someone and 90 days later they go bankrupt, they can get money back?"

Moore & Moore Services owner Lloyd Moore says he's still owed $10,000 from Buccaneer Oil that he'll never see, and now the company wants back the money it did pay him.

The letter from Buccaneer Oil's trustees says, "It is understandably frustrating for a creditor who received payments for legitimate debts to be required to return the payments."

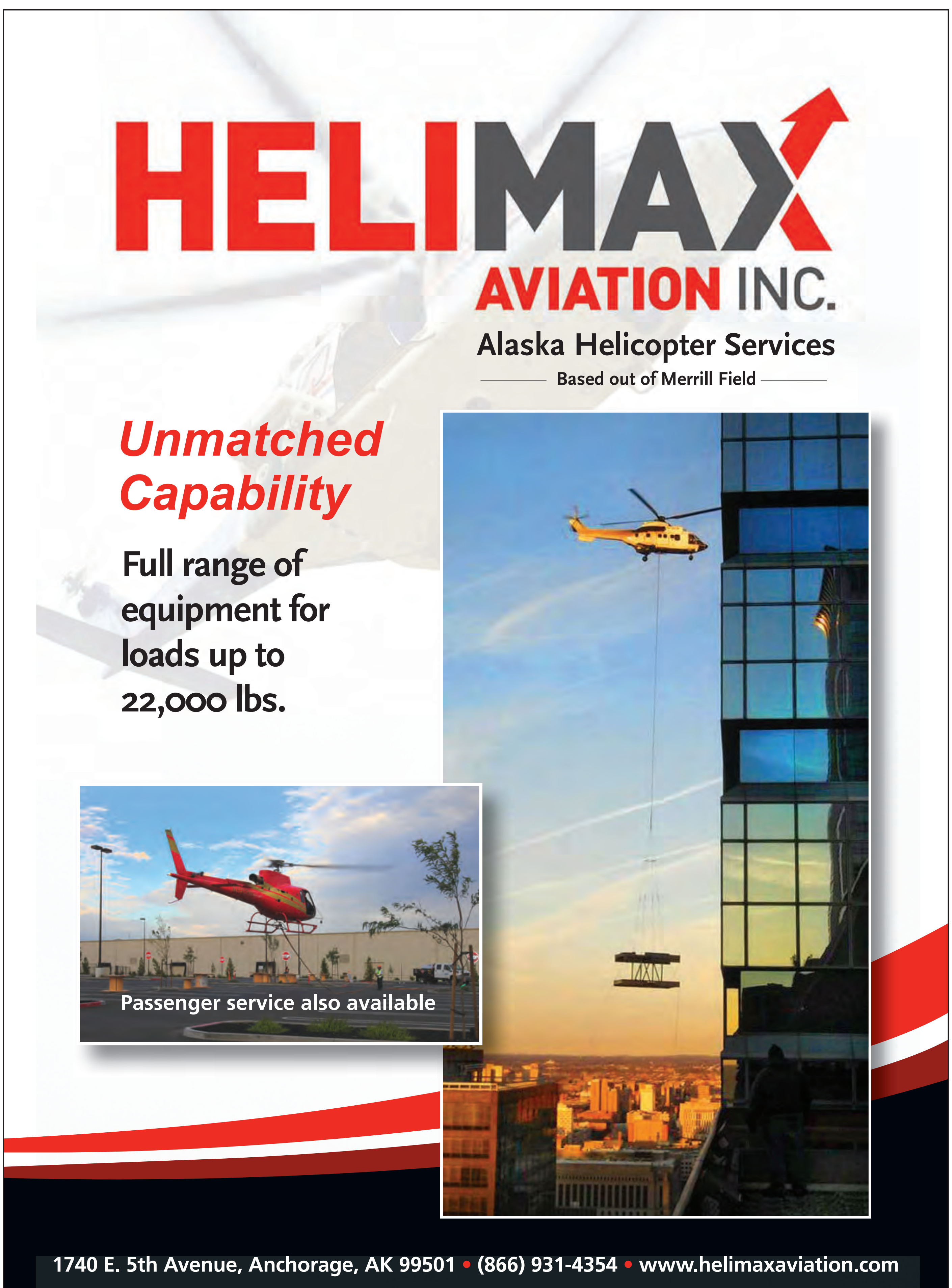
It goes on to explain these preferential payments should be returned so that funds can be distributed to creditors proportionately.

City Manager Katie Koester says the city attorney will file a response.

Anchorage bankruptcy lawyer David Bundy says he has been contacted by several business owners who received letters.

"I think trustees often send these things out wholesale, cast a wide net, and see what happens," Bundy said. "It's a real surprise to contractors or suppliers who got money a year or a few years ago."

—ASSOCIATED PRESS



● PIPELINES & DOWNSTREAM

NWT touts Arctic line

By GARY PARK

For Petroleum News

Enbridge and TransCanada, Canada's two premier pipeline companies, have offered only a guarded response to word from the Northwest Territories Industry Minister Dave Ramsay that his government has been talking to unidentified companies about shipping crude oil through the Arctic.

In recent interviews, Ramsay said he and NWT Premier Bob McLeod have been actively presenting their ideas for delivering crude to a tanker port on the Beaufort Sea coast as an alternative to the other plans for pipelines out of Alberta that are bogged down in regulatory delays and court challenges.

He said the Arctic route is now the viable option for shipping crude from the Alberta oil sands, now that the projects which are before regulators and governments have become snarled in resistance to pipelines destined for Canada's east and west coasts and the U.S. Gulf Coast.

Ramsay said the idea has generated industry interest, but he cautioned that these are early days.

He declined to identify the companies he and McLeod have met with, suggesting that would put them "on a spot."

For now, the goal is to "get folks to look at different scenarios," Ramsay said.

Enbridge, while confirming it has met with Ramsay, also noted that it "regularly engages with various communities and stakeholders, including governments" on business opportunities.

Currently, Enbridge operates the only crude pipeline out of the NWT, but its 530-mile link from Imperial Oil's Norman Wells oil field to Zama in northern Alberta is running at only 20 percent of capacity because of declining production.

TransCanada would not be drawn into public discussion on the Arctic proposal, saying it does not divulge potential business opportunities.

It said the details of any projects linked to its pipeline network would only be disclosed "once they become more certain."

Ramsay said the North could increasingly become a viable option if TransCanada's Keystone XL and Energy East and Enbridge's Northern Gateway are unable to overcome their opposition and enter the construction phase.

Energy and Arctic consultant Doug Matthews told The Canadian Press news agency that a pipeline to carry oil sands crude down the Mackenzie River Valley would be a tough sell to aboriginal communities, most of which are partners in the shelved Mackenzie Gas Project.

Without ruling out an Arctic crude pipeline, he said such a proposal would be "challenging." ●

continued from page 4

NEW FINDS

thick and composed of very fine to fine sand grains, forms light-gray-weathering cliffs. The sands appear to have been deposited in a near-shore setting, the DGGS report says.

At Hickerson Lake on the flanks of Iliamna Volcano the team found a coarse conglomerate in the Naknek formation. The channel shaped geometry of this conglomerate body suggests that it resulted from the infilling of an ancient submarine canyon, a canyon that may have acted as a conduit for coarse sediment to flow into a marine basin floor. This interpretation of the field observations provides a model for the prediction of where effective reservoir rocks may exist within the Naknek formation, the report says.

Because of the relatively poor permeability and porosity generally observed in the Mesozoic rocks of the Cook Inlet basin, some geologists have suggested that fracturing within the rocks may be important in identifying potential hydrocarbon exploration plays. With that in mind, the DGGS-led team has been measuring and assessing geologic faults and rock fracture patterns observed in the Iniskin Peninsula area.

The patterns discovered are providing insights into both the deformation history of the Cook Inlet basin and into possible fluid migration paths in the subsurface of the basin, the DGGS report says.

The scientists involved in the Cook Inlet research are still conducting laboratory analysis work on rock samples gathered during the field work and will publish the results of this work in due course. ●

Contact Alan Bailey at abailey@petroleumnews.com


INDUSTRY LEADER
GLOBAL EXPERTISE
PROVEN EXPERIENCE
Fluor is one of the world's largest publicly traded engineering, procurement, fabrication, construction, and project management companies. Since 1954, we have built some of the largest and most significant projects in the history of Alaska.
Safety. Integrity. Teamwork. Excellence.
www.fluor.com
Alaska Office • 4300 B Street, Suite 210 • Anchorage, AK 99503 • 907.865.2000
FLUOR®
© 2015 Fluor Corporation. All Rights Reserved.
ADAV115115

● ENVIRONMENT & SAFETY

EPA proposes voluntary methane program

Companies in oil and gas industry could gain recognition for efforts in curtailing methane emissions from industrial operations

By ALAN BAILEY
Petroleum News

The Environmental Protection Agency is proposing the launch of a new program aimed at encouraging the reduction of methane emissions from the operations of companies in the oil and gas industry. The agency says that the voluntary program, dubbed the "Natural Gas STAR Methane Challenge," would help meet government targets for reduced methane emissions while giving recognition to companies that take action to curtail emissions of the gas.

Methane, the primary component of natural gas, is a potent greenhouse gas that can make a significant contribution to global warming if released into the atmosphere. The gas, processed and transported in large volumes in association with the natural gas industry, as well as being produced and used in conjunction with oil production, can be emitted for a number of reasons, including equipment leaks, compressor venting and pipeline venting.

EPA is conducting a series of webinars during July to provide information about its proposals and the agency is seeking feedback from stakeholders by Sept. 1.

Voluntary programs

EPA has for 20 years been operating a voluntary Natural Gas STAR Program, in which companies have evaluated their operations and implemented ways of reducing their methane emissions. A commitment to participate in this existing program involves a requirement to report on actions taken but not on the results of those actions. The proposed new program would build on this arrangement by having companies commit to specific emission reduction actions or targets and then transparently report the results, EPA says.

The proposed program would work alongside and complement an existing industry program called One Future, an industry-led partnership in which companies make commitments to reductions in methane emissions, EPA says.

EPA says that it had previously considered implementing a program called Gas STAR Gold, in which companies could have achieved a "Gold" certification by implementing a comprehensive set of emission-source protocols for industrial facilities. However, following requests from companies for a more flexible approach, the agency instead opted for the proposed Methane Challenge Program, EPA says. Rather than focusing on individual facilities, the proposed program would emphasize company-wide commitments, with flexibility over various program elements, including implementation timeframes.

The objectives of the proposed program include the encouragement of ambitious industry commitments; the promotion of innovative approaches to emissions reduction; accountability and transparency in making and achieving commitments; recognition for companies that have made progress in reducing methane emissions; and the recognition of improved environmental performance through quantitative assessments of emission reductions.

And companies participating in the program would have an opportunity to be publicly recognized as leaders in reducing U.S. methane emissions, EPA says.

Two options

EPA proposes two options for demonstrating methane emissions reduction: a commitment to best management practices for achieving emissions reductions, and a commitment to some level of methane emissions intensity, as in the One Future program. Emissions intensity refers to the amount of methane emitted in relation to the amount of methane produced.

A company would sign up for the Methane Challenge Program through a memorandum of understanding with EPA. The transparent reporting of results for the Methane Challenge Program would then, as far as possible, go through EPA's existing greenhouse gas reporting program, EPA says. Companies signing up as partners in the program would track their progress through a mechanism such as a website, with EPA publishing annual reports compiling relevant data from partner companies for public release.

Companies signing up for the best management practice option within the program would designate a timeframe for implementing best management technologies and procedures. However, in the interests of achieving emissions reductions in the near term, implementation must be achievable within five years, and preferably sooner. Companies would report annually on progress in implementing mitigation actions and the program would track emissions reductions achieved through these voluntary actions.

EPA is proposing the organization levels within a company at which Methane Challenge commitments might appropriately be made. And, in recognition that there may be specific operational circumstances that might limit the implementation of best management practices, the agency is also considering the possibility of allowing exemptions for some emissions sources that do not represent a significant portion of overall emissions.

Companies opting to participate in the reduction in emissions intensity aspect of the program would join the existing One Future industry program. The One Future system involves companies making commitments to emission intensity goals, with flexibility in finding the most cost-effective means of achieving those goals, EPA says.

By joining the EPA Methane Challenge Program through One Future, a company would agree to provide relevant data to EPA, to demonstrate the results of methane reduction actions. EPA would provide a platform for the transparent tracking of a company's progress against commitments made.

Seeking feedback

In addition, EPA is seeking feedback on

see METHANE PROGRAM page 13

NORTH OF 60 MINING news

www.MiningNewsNorth.com The weekly mining newspaper for Alaska and Canada's North Week of August 2, 2015

page 10 Australian junior makes bid for Yukon Zinc's closed mine

NEWS NUGGETS

Compiled by Shane Lasley

Millrock cuts deal for Pogo area assets

Millrock Resources Inc. July 29 reported that it has struck a deal with Corvus Gold Inc. to purchase Raven Gold Alaska LLC's assets located in or pertaining to the Goodpaster Mining District of Interior Alaska. As part of the agreement, Millrock has purchased the West Pogo gold property from the Corvus subsidiary. The West Pogo claims cover the projection of a favorable structure that passes through Sumitomo Metal Mining Co.'s Pogo Mine., located about two miles to the east. Millrock paid US$20,000 for a 100 percent interest in West Pogo, with Raven retaining a royalty of 3 percent net smelter return royalty on precious metals and 1 percent NSR on base metals. Millrock may reduce the precious metals royalty to 1 percent by making payments totaling US$7 million. Per the terms of a collaboration agreement signed with an unnamed major mining company earlier in 2015, Millrock will offer the major the opportunity to assign West Pogo to "designated project" status, subject to an option agreement with pre-determined terms. With funding from its strategic partner, Millrock also has purchased an extensive, proprietary database of geological information from Raven. The database was created through more than US$5 million of exploration completed by Anglogold-Ashanti and International Tower Hill Mines in the 1990s and early 2000s and contains information from throughout Alaska's Goodpaster Mining District and the Pogo Mine area. Included in the information are geochemical results for thousands of stream sediment, soil, rock and vegetation samples, airborne geophysical surveys, structural and remote sensing analyses and project generation reports. The purchase price for the database is US$100,000. A royalty of 1 percent NSR in favor of Raven will be payable for any claims staked by Millrock within a defined area of interest in the next five years. The royalty may be reduced to 0.5 percent by payment of US$2 million. Corvus also has granted Millrock a right of first refusal to acquire the LMS project, another venture in the Pogo area, under agreed upon terms until Sept. 1. Millrock Chief Exploration Officer Philip St. George said, "With the acquisition of the Anglogold-Ashanti database, our company will have the most comprehensive store of geological knowledge on this district. We will have a distinct competitive advantage for generating new

see **NEWS NUGGETS** page 10

EXPLORATION

Perseverance pays off

Kiska finds new buyer for Whistler, focuses on larger copper-gold portfolio

By SHANE LASLEY

Mining News

Less than three months after a pending sale of its Whistler property in Southcentral Alaska fell through, Kiska Metals Corp. has found a new buyer for the advanced-stage copper-gold exploration project.

Under a binding agreement announced last week, Brazil Resources Inc. will issue Kiska 3.5 million shares in exchange for full ownership of Whistler, including the mining claims and other assets belonging to the project.

Brazil Resources' shares were trading at C46 cents per share on the Toronto Venture Exchange on July 21, making the deal worth roughly C$1.61 million at the signing of the agreement.

"This transaction greatly increases the company's flexibility going forward," said Kiska President Grant Ewing. "Kiska will no longer incur any holding or exploration costs, and it retains excellent carried participation in the future upside of the Whistler Project and other projects through its shareholding in BRI."

With the Whistler property and associated costs shifted out of its portfolio, the prospect generator can now focus more attention on its primary strategy of securing and fostering partnerships for the numerous other copper and gold projects it has generated, including its Copper Joe project in Alaska and Kliyul porphyry project in north-central British Columbia.

"Kiska continues to execute the prospect generator business model by having top-tier mining companies drill and explore our projects this season, such as Kliyul and Copper Joe," said Ewing.

Re-examining Whistler

The Whistler property blankets roughly 65 square miles of gold-copper prospective lands in the Kahiltna Terrane region of Southcentral Alaska.

SHANE LASLEY

Drilling has cut two distinct gold-copper zones at the Island Mountain deposit located in the southern half of the 65-square-mile Whistler property in Southcentral Alaska.

This large land package is anchored by its namesake deposit, which hosts 79.2 million metric tons of indicated resource grading 0.51 grams per metric ton gold, 1.97 g/t silver and 0.17 percent copper; and 145.8 million metric tons of inferred resource averaging 0.40 g/t gold, 1.75 g/t silver and 0.15 percent copper.

Brazil Resources is considering this resource for Whistler as historical until an independent qualified person re-examines the parameters of the work used to calculate the 2011 resource and issues a new estimate for the Whistler deposit that reflects current metal prices.

Roughly 20 other prospects and deposits have been identified across the wider Whistler property, including those found at Whistler orbit, Island Mountain and Muddy Creek.

The Whistler orbit is a roughly 20-square-mile

see **WHISTLER BUYER** page 11

NORTHERN NEIGHBORS

Compiled by Shane Lasley

Seabridge trims 2015 exploration program

Seabridge Gold Inc. July 28 said initial results from the 2015 core drilling program at its KSM project in northwestern British Columbia points towards a sizeable expansion of the Mitchell deposit at depth, but further evaluation is needed prior to additional drilling. M-15-130, the first hole of the program, cut 174 meters of 0.55 grams per metric ton gold and 0.28 percent copper and M-15-131, drilled more than 200 meters to the northeast, cut 167 meters of 0.81 g/t gold and 0.25 percent copper. Seabridge said these results appear to represent a large, continuous zone amenable to block cave mining. Over the past two years, Seabridge has successfully targeted higher grade zones beneath KSM's near-surface porphyry deposits, resulting in the discovery of Deep Kerr and the Iron Cap Lower Zone, two copper-rich deposits that have added nearly one billion metric tons of better grade to project resources. The program this year has continued this multi-year exploration effort to add higher grade zones by testing the down-plunge extension of the Mitchell deposit. The company, however, says further evaluation needs to be done before further pursuit of this target is undertaken. "The size and grade of the planned Mitchell block cave are likely to be enhanced by this data. Also, the mineralogy and textures from drill core suggest that we are approaching a zone of higher-temperature and fluid flow that may offer even better grades, but there is evidence of faulting that needs to be analyzed before we undertake further drilling on this target," explained Seabridge Chairman and CEO Rudi Fronk. "Although we are excited about where this discovery could lead, we have decided to scale back this year's Mitchell program by about C$2.2 million until we have completed our analysis of all the available data. The balance of the program will concentrate on expanding the block cave shapes associated with the Deep Kerr deposit."

Over the past two years, Seabridge has successfully targeted higher grade zones beneath KSM's near-surface porphyry deposits, resulting in the discovery of Deep Kerr and the Iron Cap Lower Zone, two copper-rich deposits that have added nearly one billion metric tons of better grade to project resources.

Drills turning at Nighthawk's Colomac

Nighthawk Gold Corp. July 28 reported the start of a 3,000-meter drill program at its Colomac gold deposit in the Northwest Territories. The program will follow up on the success of Nighthawk's 2014 drilling at Zone 1.5, where hole C14-06 intersected 52.50 meters of 7.78 grams per metric ton gold. "The significant results we encountered from Zone 1.5 during our 2014 drill program prove the northern portion of the Colomac sill merits further exploration," said Nighthawk President and CEO David Wiley. Zone 1.0, another target in the northern portion of Colomac that is believed to host mineralization similar to Zone 1.5 also is planned to be drilled this year.

MinQuest makes offer for Wolverine Mine

Australia-based MinQuest Ltd. July 23 said it has submitted a conditional,

see **NORTHERN NEIGHBORS** *page 12*

Contact North of 60 Mining News:

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

Petroleum news

North of 60 Mining News is a weekly supplement of the weekly newspaper, Petroleum News.

Shane Lasley	PUBLISHER & NEWS EDITOR
Rose Ragsdale	CONTRIBUTING EDITOR
Mary Mack	CEO & GENERAL MANAGER
Susan Crane	ADVERTISING DIRECTOR
Heather Yates	BOOKKEEPER
Bonnie Yonker	AK / INTERNATIONAL ADVERTISING
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Curt Freeman	COLUMNIST
J.P. Tangen	COLUMNIST
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Renee Garbutt	CIRCULATION MANAGER
Mapmakers Alaska	CARTOGRAPHY

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

NEWS • 907.229.6289
publisher@miningnewsnorth.com

CIRCULATION • 907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com
Bonnie Yonker • 425.483.9705
byonker@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

Several of the individuals listed above are independent contractors

NORTH OF 60 MINING NEWS is a weekly supplement of Petroleum News, a weekly newspaper.
To subscribe to North of 60 Mining News,
call (907) 522-9469 or sign-up online at www.miningnewsnorth.com.

continued from page 9

NEWS NUGGETS

grassroots exploration targets for high-grade gold deposits with our strategic partner."

Dowa adds MHT lands to Palmer option

Constantine Metal Resources Ltd. July 28 reported that Dowa Metals & Mining Alaska Ltd. has selected a small subset of the Haines Block mining lease that surrounds the Palmer Property to become part of the Constantine-Dowa option and joint venture agreement. The Haines Block is a roughly 99,000-acre property that Constantine leased from Alaska Mental Health Trust Authority, a state corporation within Alaska. Dowa has selected 3,483 acres of this land with both surface and mineral rights that is immediately adjacent to the state and federal lands that host the volcanogenic massive sulfide resource at Palmer to be included as part of the Palmer project. Dowa (49 percent) and Constantine (51 percent) will share the US$25,000 annual rental requirements of the lease for the first three-year lease term. Dowa will meet the minimum exploration requirements of the lease during the option period and until such time as a joint venture is formed. These minimum requirements are US$75,000 by Sept. 1, escalating by US$50,000 annually, thereafter, and these expenditures will be deemed to be earn-in expenditures paid by Dowa. In addition to being prospective for VMS mineralization, the Haines Block covers areas upland of the Porcupine placer district, which is estimated to have produced 82,489 ounces of gold, adding to the intriguing targets on the expansive property. The remaining mineral rights of the Haines Block, representing about 96 percent of the total Haines Block land package, are 100 percent Constantine-owned, subject to a right of first offer by Dowa that expires Sept. 1, 2017. A minimum US$75,000 exploration program has commenced on the Haines Block, with work on lands controlled 100 percent by Constantine focused on drill-target generation. The work includes mapping and geochemical sampling of several known VMS prospects and alteration zones located proximal to the Palmer Property. Work also will include remote sensing, reconnaissance-scale geochemical surveying, soil sampling, and prospecting to identify new prospects within prospective host rocks. Work within the selection area may include surface geophysics and one or more drill holes that will target mineral resources on the adjacent federal claims of the Palmer Property.

Strongbow closes Alaska tin projects buy

Strongbow Exploration Inc. July 24 said it has closed its acquisition of the Sleitat and Coal Creek tin properties in Alaska as well as a C$1 million non-brokered private placement financing. Strongbow acquired the tin properties, from Osisko Gold Royalties Ltd. and Strongbow Director Ronald Netolitzky. Netolitzky has been involved with Thor Gold, a former subsidiary of Solomon Resources Ltd., since the 1980s. Osisko acquired an interest in the Sleitat and Coal Creek properties through the 2010 purchase of Brett Resources Inc., a former explorer of the two Alaska tin projects. Thor held a 20 percent undivided interest in the Sleitat property and Brett held the remaining 80 percent undivided interest in Sleitat and a 100 percent interest in the Coal Creek property. Strongbow issued 5 million shares to Brett and 1.5 million shares to Thor. Additionally, Brett was granted a 1.75 percent net smelter return royalty, and Thor will receive a 0.25 percent NSR on the properties. Strongbow also granted Osisko a first right of refusal on the sale of any future royalties on any of its properties. Concurrent with the closing of the acquisition of the Alaska tin properties, Strongbow raised C$1 million by issuing 10 million units at C10 cents per unit. Each unit consists of one common share and one half of one purchase warrant, which allows the holder to purchase one share of Strongbow at a price of C20 for two years. Strongbow paid cash C$19,500 in finders' fees associated with the private placement. Strongbow insiders participated in the financing, including a C$200,000 subscription by Osisko. Together, Osisko and Brett hold 7 million Strongbow shares, or 27.3 percent of the post-closing issued shares of the company.

Royal Gold provides update on Tetlin, royalties

Royal Gold Inc. July 23 provided an operational update for its streaming and royalty interests at Mount Milligan, Phoenix and Voisey's Bay, as well as an update on exploration at the Peak Gold Joint Venture. Royal Gold estimates spending for Peak Gold, a joint venture with Contango Ore Inc. to explore the Tetlin gold-copper project in Alaska, to be around US$2 million for the quarter ending June 30. A total of US$5 million is planned for an initial phase of 2015 exploration at Tetlin. Royal Gold subsidiary, RGLD Gold AG, purchased about 21,400 ounces of gold from the Mount Milligan mine in British Columbia at a cash price of US$435 per ounce as part of its purchase and sale agreement with Thompson Creek Metals Co. Inc. during the quarter ending June 30. During the same period, RGLD Gold sold about 23,000 oz of gold related to Mount Milligan. In addition, RGLD Gold had some 5,300 oz remaining in inventory as of June 30. On June 24, Rubicon Minerals Corp. reported its first gold pour of 741 oz at the Phoenix Gold project in Ontario. Rubicon will deliver 6.3 percent of the gold from the Phoenix mine until 135,000 oz have been delivered to RGLD Gold, then 3.15 percent thereafter. Royal gold will pay 25 percent of the spot price at the time of delivery. RGLD Gold will begin receiving deliveries from commissioning activities and anticipates more substantial gold deliveries as the mine ramps up to design production. Royal Gold also received the first quarterly royalty payment relating to processing Voisey's Bay nickel concentrates at Vale's new Long Harbour hydrometallurgical plant in Newfoundland. ●

continued from page 9

WHISTLER BUYER

region that encompasses the Whistler deposit as well as the Raintree and Rainmaker discoveries.

While the Whistler deposit outcrops on a ridge, the other prospects in the Whistler orbit are largely covered with a 10- to 15-meter layer of glacial till in the valley below.

Like all of the blind prospects in the orbit, Raintree West, located some 1,800 meters east of the Whistler deposit, was first identified with airborne geophysics. One hole drilled here in 2009 cut two zones of mineralization – 128.7 meters of 0.56 g/t gold and 0.16 percent copper from a depth of 59 meters; and 40 meters of 0.98 g/t gold and 0.21 percent copper from 429 meters.

Drilling at Raintree North, Raintree South and Rainmaker has identified porphyry copper-gold mineralization similar to Raintree West.

Island Mountain, located about 14 miles south of the Whistler deposit, was discovered by Kiska in 2009.

IM-09-001, the discovery hole at Island Mountain, cut two distinct mineralized zones – a 150-meter upper zone that averaged 0.72 g/t gold, 2.37 g/t silver and 0.16 percent copper; and a 107-meter lower zone that averaged 1.22 g/t gold, 0.69 g/t silver and 0.05 percent copper.

Muddy Creek, a gold target about six miles northwest of Island Mountain, is a promising intrusion-related gold target. The potential of this prospect is underscored by the 4.72 g/t gold average grade of 150 rock samples collected over a four-square-mile area.

Beyond the multiple deposits and prospects that the property has to offer, Whistler comes with a number of physical assets and upgrades that will make future exploration easier and less expensive.

In 2011, Kiska completed the construction of a 50-person camp and a gravel airstrip capable of landing a Boeing DC-3 aircraft near the Whistler orbit area of the property.

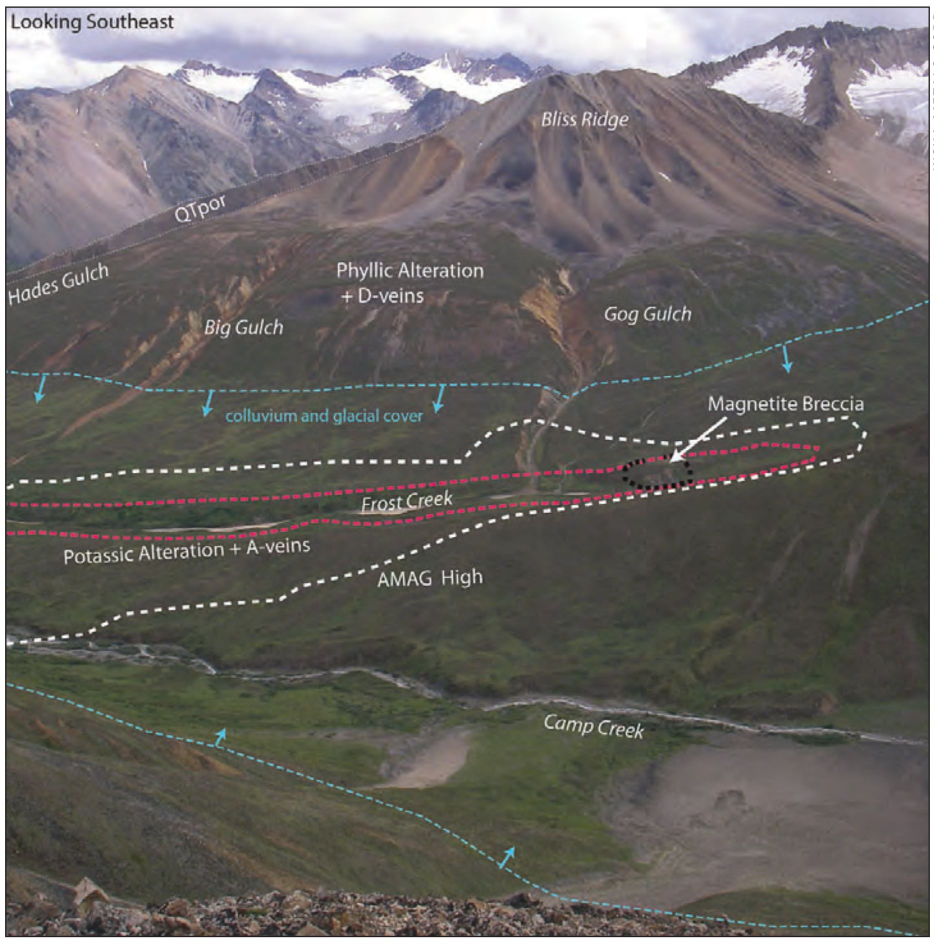
A four-mile gravel road connects the camp and airstrip to the Whistler deposit.

In addition to living quarters, the camp comes with a generator; wireless satellite phone and internet system; wireless cell phone service; water well; septic system; two core logging facilities; core cutting facility; core storage area; and a large maintenance garage.

Despite getting a good deal on a relatively advanced copper project in Alaska, Brazil Resources is not shifting the focus its name implies.

"The company is dedicated first and foremost to our high-potential gold development projects in Brazil," explained Brazil Resources CEO Garnet Dawson. "However, with the Whistler Project, at a cost of just 4.5 percent dilution, we have an agreement to acquire another project with a historic multi-million ounce resource, large expansion potential, relatively low holding cost and the support of Kiska's superior technical team, which is also in joint ventures with First Quantum Minerals Ltd. and Teck Resources Ltd."

Upon finalization of the deal, Brazil



KISKA METALS CORP.

Porphyry quartz-magnetite veins are sporadically exposed at surface along a 1,400-meter- (nearly a mile) long segment of Frost Creek at Kiska Metals' Copper Joe project in Alaska. Kiska believes a magnetic anomaly in the valley below provides a compelling target to this porphyry copper-gold prospect.

Resources has agreed to pay Kiska C$10,000 a month to provide support and maintenance services for the Whistler project for 15 months.

Copper Joe drilling considered

Though Kiska has sold Whistler, the project generator is not done exploring the Kahiltna Terrane region of Southwest Alaska where the property is located.

First Quantum Minerals Ltd., a global mining company with a particular focus on copper, is funding exploration of Copper Joe, a copper-gold-molybdenum porphyry project situated roughly 20 miles southwest of Whistler.

The 55 state mining claims that make up the Copper Joe property blanket a large alteration system that shows all the indicators a potentially copper-bearing porphyry system lies in wait.

A core zone of this alteration and associated porphyry quartz-magnetite veins are sporadically exposed at surface along a 1,400-meter (nearly a mile) long segment of Frost Creek.

While grab samples collected along the Frost Creek showing have only returned weakly anomalous gold and copper mineralization, it is believed the veins found there are the top of the porphyry system and the core zone lies somewhere below.

Kiska and First Quantum believe that a nearby 450-meter-diameter intense magnetic high anomaly could be where this core zone is hiding.

"A central portion of the magnetic anomaly is coincident with a resistivity high that may represent strong potassic alteration or a high concentration of quartz-magnetite veining that together define a very compelling drill target," Kiska explained in a January summary of the property.

Under an option agreement signed in 2014, First Quantum can earn an initial 51 percent interest by investing US$5 million at Copper Joe by the end of 2017, a stake that would increase to 80 percent if the copper miner decided to build a mine there.

After signing the deal last August, First Quantum drilled two holes at Copper Joe late in 2014. While this initial program did not return significant copper and gold assay results, the confirmation of a strong porphyry-hydrothermal system was enough to pique the interest of the global miner.

To hone in on areas to conduct a follow-up drill program, First Quantum invested US$826,000 on an early 2015 program that included geological mapping and a magnetotelluric geophysical survey at Copper Joe.

Teck plans Kliyul drilling

Drilling is also being planned for Kliyul, a copper-gold porphyry project located 42 miles (67 kilometers) southeast of the past-producing Kemess Mine in northern British Columbia.

Teck Resources Ltd., which can earn a 51 percent interest in in this property by investing C$5.5 million in it by Jan. 31, 2018, is planning to drill two or three holes to test the main Kliyul zone.

There have been 21 holes drilled at Kliyul, mostly shallow holes completed in the 1990s. One such hole is reported to have cut a 76.4-meter intercept averaging 1.16 g/t gold and 0.33 percent copper. The assay certificates for this hole, however, are not available for confirmation.

One hole drilled at Kliyul zone in 2006 cut 217.8 meters averaging 0.23 percent copper and 0.52 g/t gold.

In addition to test the Kliyul zone with its own drilling, Teck's 2015 exploration program will include roughly 20 line-kilometers of induced polarization geophysics over other geological and geochemical targets on the property.

Prior to the 2015 program, Teck has invested roughly C$765,000 on Kliyul exploration.

Opportunities available

In addition to the partnered projects, Kiska Metals has nine other early stage exploration properties available for option, including five copper and gold properties located in northern and central B.C.; a high-grade gold prospect in Interior Alaska; a gold prospect along the Battle Mountain-Eureka trend in Nevada; a high-grade gold prospect located in Ontario's Abitibi Greenstone belt; and a copper-gold property in Australia.

To help generate additional properties for its portfolio, Kiska announced it has entered into an alliance with BW Mining to generate Neural Network targets to carry out innovative exploration in Quesnel porphyry belt in B. C. and the Abitibi gold belt in Ontario and Quebec.

Neural Networks integrates numerous exploration datasets – geology, geochemistry, geophysics, satellite – to produce unbiased targets based on the signatures of known deposits.

Kiska says this method is significantly leveraging public and private geoscience data and dollars, quickly and efficiently reducing the exploration search space, and targeting in areas with challenging overburden cover.

Kiska also has entered into an alliance agreement with Fathom Geophysics for the exclusive rights to a proprietary method for evaluating and targeting porphyry systems in three dimensions based on trace element abundances and zonation in surface rock samples and/or drill core.

The prospect generator is looking for partners interested in testing these methods.

"In these challenging market conditions, Kiska stands out by incorporating innovative exploration alliances and new targeting technologies that aim to improve the odds of discovery, optimize exploration expenditures, and generate quality exploration opportunities to feed the industry's diminishing pipeline, all while continuing to reduce the company's burn rate," added Ewing. ●

continued from page 10

NORTHERN NEIGHBORS

non-binding offer for the Wolverine zinc mine in eastern Yukon Territory. MinQuest is examining the potential of utilizing the existing processing and tailings management facilities at Wolverine to fast-track the development of the Kona deposit at its own Fyre Lake copper project, which is located about 28 kilometers (17 miles) to the south. Jeremy Read, managing director of MinQuest, explained: "Using the existing infrastructure at Wolverine could decrease the pre-production capital expenditure for putting Fyre Lake into production by as much as C$150 million to C$200 million, which would substantially improve the economics of the Fyre Lake copper project." Yukon Zinc Corp. has invested more than C$500 million on development of Wolverine since it acquired the project in 2008. The mine was commissioned in 2010, but ran into a number of difficulties during the operational phase. Citing low metals prices, Yukon Zinc put the operation on care and maintenance in January. In March, the Supreme Court of British Columbia granted Yukon Zinc protection from its creditors. PricewaterhouseCoopers Inc., which was appointed as monitor of Yukon Zinc, has been authorized to seek of offers to invest in Yukon Zinc or to purchase the company's assets. MinQuest has made a conditional offer to purchase Wolverine, including the mine's remaining mineral resources, mill, tailings facility, buildings, power plant, leases and surrounding exploration claims. The offer, however, is conditional upon MinQuest securing the finances to complete the purchase by Aug. 10.

SHANE LASLEY

Yukon Zinc Corp. has invested more than C$500 million on development of Wolverine Mine in Yukon Territory since it acquired the project in 2008. Australia-based MinQuest Ltd. has made a conditional offer to purchase Wolverine, including the mine's remaining mineral resources, mill, tailings facility, buildings, power plant, leases and surrounding exploration claims.

MinQuest said it is in discussions with a number of potential financiers who have expressed interest in presenting a term sheet for financing acquisition of the mine. The terms of the offer are to remain confidential until it meets the condition. If MinQuest can swing the deal, the junior miner believes the purchase could fast-track the development of the Kona deposit, which has a JORC-compliant indicated and inferred resource of 12.6 metric tons averaging 1.56 percent copper, 0.09 percent cobalt, 0.30 zinc and 0.63 grams per metric ton gold. Preliminary studies completed by MinQuest have concluded that the Wolverine processing plant is capable of being converted to a single float circuit plant, producing a copper-cobalt-gold metal concentrate.

Klaza samples show great metals recovery

Rockhaven Resources Ltd. provided an update on metallurgical testing of material from its Klaza gold-silver property located in the Dawson Range Gold Belt, Yukon Territory. Metallurgical testing was conducted by Blue Coast Research Ltd. on three zone-specific and one property-wide composite. A locked cycle flotation test on a project-wide composite sample, followed by pressure oxidation and carbon-in-leach cyanidation of a gold-bearing sulphide concentrate, yielded overall recoveries of 95 percent gold, 90.8 percent silver, 91.2 percent zinc, and 84.6 percent lead to potentially saleable products. Of the gold recovered, 65 percent reported to doré. The process flowsheet consists of lead flotation, followed by zinc flotation, and then by arsenopyrite-pyrite flotation. The arsenopyrite-pyrite concentrate is then pressure oxidized to liberate the gold and leached with cyanide. The overall flotation tails are also leached with cyanide.●

● EXPLORATION & PRODUCTION

State approves Sword participating area

Decision also certifies Cook Inlet Energy's Sword No. 1 well at West McArthur River as capable of producing in paying quantities

By ERIC LIDJI
For Petroleum News

The state has approved the formation of a Sword participating area and certified the Sword No. 1 well at the West McArthur River unit, on the west side of Cook Inlet.

The pair of July 23 decisions more fully incorporates the well into the unit. The Sword participating area includes 360 acres over portions of ADL 359111 and ADL 17602. The unit already includes the Area 1 participating area over a portion of ADL 359111 (see map).

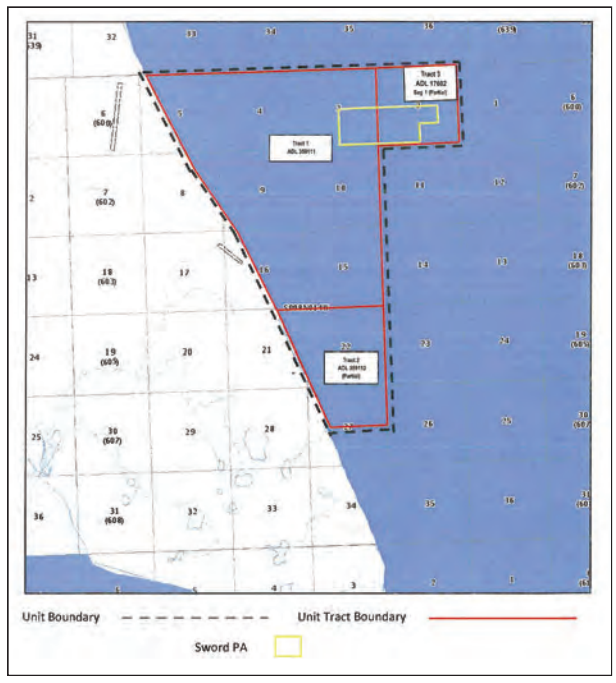
In its initial request, operator Cook Inlet Energy LLC had also requested an expansion and separately a contraction of the West McArthur River unit boundary. The state Division of Oil and Gas approved those requests in a separate decision, earlier this year.

Recent activities

Exploration in the area began in 1965, when Pan American Petroleum Corp. drilled the West Foreland Unit No. 1 well within the boundaries of the current Sword participating area, approximately half a mile west of the Sword No. 1 well. The earlier well encountered oil-stained reservoir rocks but not free flowing oil. A failed packer prevented the company from conducting a drill stem test. The well was plugged and abandoned.

The state approved the formation of the 6,330-acre West McArthur River unit in July 1990 over two leases — ADL 359111 and ADL 359112. Stewart Petroleum drilled the WMRU No. 1 well in June 1991, one mile south of West Foreland Unit No. 1. The state approved the formation of the Area 1 participating area in September 1994. The participating area reached peak production in January 1996, at 4,957 barrels per day.

Operator Cook Inlet Energy acquired the West McArthur River unit in 2009 as part of the bankruptcy proceedings of former operator Pacific Energy Resources Ltd. An expansion and a related contraction approved earlier this year left the unit covering just 640 acres.



STATE OF ALASKA

Cook Inlet Energy drilled Sword No. 1 in 2013 on ADL 17602, which was outside the West McArthur River unit boundaries at the time and held by production at the neighboring Trading Bay unit. Cook Inlet Energy and Hilcorp Alaska LLC jointly owned the lease. When Sword No. 1 encountered commercial volumes of oil, Trading Bay unit operator Hilcorp farmed out its interest in the well to Cook Inlet Energy. Cook Inlet Energy later acquired 100 working interest in the relevant segment of lease ADL 17602.

Sword No. 1 began pilot production in November 2013 at an initial rate of 800 barrels per day and has since averaged between 500 and 600 bpd from the Hemlock Zone, Lower Tyonek "G" Oil Zone and Lower Tyonek "G" Upper Zone, according to the state.

The Sword prospect is one of two Cook Inlet Energy has been pursuing at the unit.

Based on information Cook Inlet Energy submitted to the Alaska Oil and Gas Conservation Commission in June 2015, comingled production from the well will be allocated under the following formula: 29 percent from the Hemlock Zone, 1 percent from the Lower Tyonek "G" Oil Zone and 70 percent from the Lower Tyonek "G" Upper Zone. Those percentages will remain in effect until the company submits revisions.

The Sword prospect is one of two Cook Inlet Energy has been pursuing at the unit.

The company has previously discussed plans to explore a Sabre prospect at a different segment of ADL 17602. The company has also proposed a Sword No. 2 well.

Certification

On Nov. 25, 2013, Division of Oil and Gas officials witnessed a three-hour flow test where Sword No. 1 produced 121.7 barrels of oil, which would approximately 973.9 barrels per day. The well was producing 600 barrels per day when Cook Inlet Energy submitted its application for certification in August 2014, according to the state.

Those rates qualify the well as being "capable of producing in paying quantities," according to the state. The certification protects the well against certain expirations. ●

Contact Eric Lidji at ericlidji@mac.com

continued from page 8

METHANE PROGRAM

how to provide appropriate recognition and incentives for companies that have already made significant progress in implementing best practices for emissions reductions or in achieving emission intensity targets.

The agency is also looking for feedback on how or whether to include within the Methane Challenge Program commitments to reductions in methane emission rates, as an alternative to emission intensity targets. However, setting rate reduction targets rather than emission intensity targets would face several challenges, including a need to allow for the impact on total methane emissions of changes or expansions in a company's operations, EPA says.

And EPA wants to establish mechanisms for the continuous improvement of the Methane Challenge Program itself by, for example, seeking and encouraging new best practices for emissions reduction and new methods for measuring and monitoring progress.

EPA is conducting a series of webinars during July to provide information about its proposals and the agency is seeking feedback from stakeholders by Sept. 1. The plan is then to revise the program, based on feedback received, before signing up initial company partners by the end of 2015. Program implementation would start on Jan. 1, 2016, with data tracking and collection systems being developed during the summer and fall of 2016. The first reports and data collection would be due in the spring of 2017, with the first data being published in the following fall. ●

Contact Alan Bailey at abailey@petroleumnews.com

GOVERNMENT

Beckham named deputy DO&G director


JIM BECKHAM

Jim Beckham has been appointed deputy director of the Alaska Department of Natural Resources Division of Oil and Gas.

Beckham, who took the position July 21, has a Bachelor of Science in marine science from the U.S. Coast Guard Academy and more than 30 years of professional leadership, management and operational experience in the public and private sectors.

The division said he has background in the technical aspects of Alaska oil and gas issues in the downstream products and transportation sectors, as well as extensive commercial negotiation experience. He also has more than 10 years of advanced level professional experience in environmental damage recovery.

—PETROLEUM NEWS

EXPLORATION & PRODUCTION

State set to release data on four wells

The Alaska Department of Natural Resources Division of Oil and Gas said July 27 that it plans to release and make public within 30 days data and information submitted to the division on four wells for which the state provided exploration credits.

The wells are Furie Operating Alaska's KLU1 and KLU2; Linc Energy Operations Lea 1; and Cook Inlet Energy's North Fork Unit 34-26.

The wells are Furie Operating Alaska's KLU1 and KLU2; Linc Energy Operations Lea 1; and Cook Inlet Energy's North Fork Unit 34-26.

Requirements to qualify for credits include submittal of information prior to drilling indicating that the oil or gas trap targeted is separate from any trap tested by a preexisting well. As part of the approval process the DNR commissioner may request that the explorer submit specific data sets which DNR may release after expiration of a 24-month period of confidentiality, following a 30-day period of public notice. The DNR commissioner may determine, however, that information should not be released "to protect information relating to the valuation of unleased acreage in the same vicinity" or if the "well is on private land and the owner, including the lessor but not the lessee, of the oil and gas resources has not given permission to release the well data."

—PETROLEUM NEWS

● EXPLORATION & PRODUCTION

Teck adjusts plans for oil sands mine

By GARY PARK

For Petroleum News

Teck Resources, the diversified Canadian miner, has shuffled and delayed its timetable for its proposed 260,000 barrels per day Horizon oil sands mine, reinforcing the jitters among major developers in northern Alberta's bitumen region.

In an updated file, Vancouver-based Teck told the Canadian Environmental Assessment Agency that the mine will now not start commercial operations until 2026, five years behind the original target and will be built in two stages, not four.

Adding to clouds hanging over Horizon, Teck has yet to make its final commitment to a mine that currently carries a price tag of C$20.6 billion.

It said the new timetable will incorporate project updates, but is dependent on regulatory approval, economic conditions and a sanctioning decision by the Teck board of directors.

Analyst — new construction unlikely

Chris Cox, an analyst with Raymond James in Calgary, said the chances of construction starting on new oil sands mines in the current oil price outlook is "pretty unlikely, if at all."

The only hope is a return to a US$100 price range, which no one is seriously touting at a time when the only sound from the oil sands is the door slamming on most big-ticket ventures as the industry forecasts a one-third drop in investment to C$23 billion this year.

Toronto-Dominion Bank economists say the downturn in capital spending has been "more swift and pronounced" than originally expected, slashing its outlook for the Alberta economy from the 0.5 percent growth it forecast in April to an 0.9 percent contraction.

Production growth

Even so, the consulting firm of IHS CERA says oil sands production is expected to grow by 800,000 bpd over the next five years as projects under construction are pushed on to completion.

That list includes Fort Hills, a C$13.5 billion project operated by Suncor Energy at 40.8 percent, with France's Total holding 39.2 percent and Teck at 20 percent. The mine is designed to introduce 180,000 bpd of new volumes when it comes on stream in late 2017.

Teck has committed about C$3 billion to Fort Hills, which is a stretch for a company being squeezed by the decline in coal and copper prices which have forced Teck to reduce its semi-annual dividend from 45 cents a share to 15 cents and triggered temporary shutdowns at six metallurgical coal mines in Western Canada. ●

Contact Gary Park through publisher@petroleumnews.com

GOVERNMENT

Walker joins national Natural Resources Committee

Alaska Gov. Bill Walker has been appointed to the National Governor's Association Center for Best Practices board and to the NGA Natural Resources Committee. The Natural Resources Committee is responsible for collaborating and advising federal policy makers on issues related to agriculture, energy, the environment and natural resources, the governor's office said in a statement.


GOV. BILL WALKER

"This position ensures that Alaska has a seat at the table when it comes to the federal policies surrounding our valuable natural resources," Walker said. "With some of the highest energy costs in the nation, it is critical for Alaska's leaders to have an influential role in discussions about energy production and consumption in the United States."

The governors met in White Sulphur Springs, West Virginia, July 24-25.

—PETROLEUM NEWS

● FINANCE & ECONOMY

Miller looking at sale of non-core assets

Company's four drilling rigs, Badami and North Fork fields, North Fork pipeline may go; large refinancing also nearing conclusion

By KRISTEN NELSON
Petroleum News

Miller Energy Resources, which operates in Cook Inlet and on the North Slope through Cook Inlet Energy and Savant Alaska, is in the midst of "repositioning its capital structure to improve its liquidity, to more appropriately finance its business and to optimize the value and growth potential of its core asset base," the company said in a July 29 statement accompanying its fourth quarter and full fiscal year results.

Miller said it recorded a fourth quarter impairment of $82.8 million on its oil and properties and an impairment of $14.3 million on the drilling rigs it owns, and as a result, "the accounting net book value of Miller Energy's assets no longer exceeds the book value of its debt."

Carl Giesler, the company's chief executive officer, said the company has been challenged by continued low oil prices and "exacerbated by past capital, financing and drilling decisions that, at least in retrospect, left us poorly positioned for such market conditions."

He said management and the board have been working on a plan to appropriately finance the business and "are working to reposition our capital structure; to rationalize our non-core assets; to develop our core Cook Inlet assets in a safe, disciplined and return-focused manner; and to stream-line our cost and organizational structure."

And no, he said, the company does not intend to file for bankruptcy.

However the company said it is evaluating several offers, "including negotiations with an Alaskan strategic partner that would provide a sale lease back financing" for the company's four drilling rigs and sale of its stake in Badami and "other non-core oil and gas assets." Giesler said those non-core assets include the North Fork pipeline, which, he said, might be more valuable to another owner or with a partner.

The company is also in the process of acquiring a $165 million loan which will largely pay down its existing debt.

Changes at the top

There are also changes at the top of the company, founded by Deloy Miller in 1967. The company has been headquartered in Knoxville, Tennessee, and moved its headquarters to Houston earlier this year.

Giesler, hired as CEO in September 2014, said in the July 29 analysts' call that Deloy Miller would be entering full retirement. When he retired as chief operating officer and chairman of the board last September, Miller was retained as a consultant. In a Form 8-K filed with the Securities and Exchange Commission July 29, the company said it terminated the separation agreement as well as a consulting agreement, and executed a promissory note under which the company will pay Miller a total of $760,079.28 in monthly installments through Sept. 15, 2016, a balance determined by converting remaining known payments in connection with prior agreements into a more predictable and definite payment schedule for the company.

Scott M. Boruff, hired as CEO by Miller Energy in 2008, became chairman of the board when Miller stepped down last September, and is lessening involvement in day-to-day operations and will focus on mergers and acquisitions, Giesler said, while remaining as a director and chairman.

David Hall remains chief operating officer, Giesler said, but the company has added Leland Tate as senior vice president, operations, and Tate will manage day-to-day operations.

The company has reduced staff and contractors from some 180 last September to a current count just over 100.

Small jobs planned

The company said that until it completes its capital repositioning process it will focus primarily on small jobs and said it has identified and begun executing eight projects with an aggregate capital requirement of some $1.8 million that are expected to increase gross production by some 1.7 million cubic feet per day of natural gas and 220 barrels per day of oil. The company said it expects each project will exceed its internal return requirements and that each will have a payback period of less than one year.

If finances permit, the company will drill the RU-7B sidetrack at its Redoubt Shoal field and the NF 22-26 at its North Fork natural gas field.

More losses

For the year and quarter just ended Miller Energy continues to lose money, with net production averaging 3,700 barrels per day equivalent, up 5 percent from 3,500 last quarter, and averaging 3,500 boepd for the fiscal year which ended April 30.

Adjusted earnings before interest, taxes, depreciation and amortization were $23.1 million for the quarter, down some 31 percent from $33.3 million last quarter.

For the year, loss before income taxes was $584.2 million, compared to the loss of $43.5 million the previous year. Miller said the loss this year relates to impairment charges on oil and gas properties and equipment, along with increased litigation and interest expense. ●

Contact Kristen Nelson at knelson@petroleumnews.com

continued from page 1

GAS CONTRACT

the term of the agreement from March 31, 2019, to March 31, 2023; reducing the contract price of natural gas from $8.03 to $7.35 per thousand cubic feet starting in contract year five (April 1, 2018, to March 31, 2019) followed by 2 percent annual increases in contract years six through nine; increasing the annual contract quantity in contract year five from 3.3 billion cubic feet to 6.9 bcf, and providing 5.5 bcf in contract years six through nine; allowing Chugach to purchase additional minor volumes as needed in contract years five through nine.

The amendment is effective Aug. 1; Chugach is requesting RCA approval by Sept. 7, or as soon as possible thereafter.

2012 consent decree

Hilcorp acquired the Cook Inlet gas production, transportation and storage assets of Marathon Alaska Production in 2012. The purchase was the subject of a 2012 consent decree among the state of Alaska, Hilcorp and Marathon, approved by state Superior Court in January 2013. Among other requirements and limitations the consent decree established price caps for natural gas from 2013 through 2017.

Chugach was not a party to the consent decree, but the gas sale and purchase agreement Hilcorp and Chugach signed in July 2013 fell under the decree. That agreement was approved by the commission in September 2013 and provided for up to 100 percent of Chugach's natural gas needs from Jan. 1, 2015, through March 31, 2018, at agreed-upon prices, volumes and service conditions.

The 2013 agreement was amended in 2014 to extend the term through March 31, 2019, and expand the time horizon for

Chugach said none of the other suppliers "have the necessary production, reserves, and deliverability infrastructure to assure the same level of reliability and optionality to be the primary gas supplier to Chugach."

non-firm purchases. A second amendment, approved earlier in 2015, was administrative in nature.

Third amendment

This third amendment, Chugach told the commission, "provides Chugach with the assurance that Chugach will have contractual rights to secure its entire gas supply requirements through March 31, 2023 from the supplier most able to deliver such gas supplies in the Cook Inlet Region."

It also "provides Chugach with the option to purchase a portion of its gas supplies from other firm gas suppliers to the extent that such other options become available and economical," the company said.

In addition to adding contract years six through nine, the amendment reduces the contract price of natural gas by 8.5 percent from the consent decree price starting in contract year five, followed by 2 percent increases in years six through nine.

In contract year five the amendment allows for a volume increase of up to 1.1 bcf over contracted volume levels with 24 months prior notice, and in contract year six allows for annual contract volume increases up to 2.6 bcf over contracted volume with 18 months prior notice. Contract years seven through nine allow for annual contract volume increases up to 2.6 bcf over contracted volume level with 18 months prior notice.

Alternative suppliers

Chugach said the provisions allowing for additional gas volumes in contract years five through nine "provide Chugach with added flexibility in the overall management of its gas supply requirements," while the amendment also allows Chugach "to augment its firm gas supply requirements from other independent suppliers."

Chugach submitted load forecasting data with the third amendment and said its projected load requirements through March 31, 2023, "can be fully met by Hilcorp under the Third Amendment."

Chugach said it actively investigated other supply options, including "diligence discussions and negotiations with other independent gas suppliers" in Cook Inlet, and in November 2014 issued a request for proposal for firm continuous delivery of base, swing and emergency gas to seven suppliers in the region, receiving response from three.

"Ultimately, Chugach determined that the underlying pricing, volume and optionality provisions coupled with Chugach's firm deliverability requirements were best matched by extending the GSPA with Hilcorp. Importantly, the flexibility (call option provisions) afforded by the Third Amendment provides alternative gas supply arrangements if market conditions allow," Chugach told the commission.

Chugach said none of the other suppliers "have the necessary production, reserves, and deliverability infrastructure to assure the same level of reliability and optionality to be the primary gas supplier to Chugach."

The filing is available on RCA's website under TA408-8. The commission is accepting comments through 5 p.m. Aug. 21.

—KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

Oil Patch Bits

PND Engineers opens Houston office

PND Engineers Inc. said it has opened a Houston, Texas, branch effective July 15. The office is located on Sam Houston Tollway West, providing a convenient, strategic base for honing PND's focus on design opportunities in the energy industry and on marine facilities.

Wade Lundberg, PE, formerly with PND's Seattle office, has relocated to the area to establish the office. He will be joined by PND Vice President Kenton Braun, PE, who will make the move from Anchorage to serve as the Houston office coordinator, and Feifei Bai, PE, who also will relocate from Anchorage.

PND's decision to base a full-time staff in the Houston area was in response to the company's expanding role in engineering oilfield and waterfront projects for key clients with offices there.

"We saw this as an opportunity to expand upon existing relationships and to build new ones within PND's key markets in the area," Braun said.

The new office is at 10497 Town and Country Way, Suite 210, phone 832-930-4830. For more information, contact Lundberg at wlundberg@pndengineers.com or Braun at kbraun@pndengineers.com.

PND Engineers Inc., founded in Anchorage more than 35 years ago, is a full-service engineering firm that provides civil, structural, arctic, marine, geotechnical and coastal engineering; hydrology; surveying; environmental permitting; project management; and construction inspection services for a wide range of projects. The firm currently employs 130 individuals, more than half of whom are registered engineers or land surveyors. In addition to its new Houston branch, PND has offices in Palmer, Juneau, and Seattle, and also is parent company to PND Engineers Canada Inc. in Vancouver.

Calista board selects first chairwoman in history


MARGARET POHJOLA

Calista Corp.'s board of directors voted in the first chairwoman in corporate history. Margaret Pohjola, a shareholder with ties to Chuathbaluk, was voted in on July 23. Board officers, like the chair, serve one-year terms following a vote by fellow directors. Outgoing Chair Willie Kasayulie had served the maximum of three consecutive annual terms. Directors are voted upon by shareholders and serve three-year terms.

"It is humbling to follow in the footsteps of early directors like Nora Guinn and Gladys Jung," said Pohjola. "Calista is currently riding a wave of operational and shareholder successes. I look forward to partnerships with the directors, management and shareholders over the next year."

Pohjola's background includes accounting work for Cook Inlet Tribal Council, NANA and the

see OIL PATCH BITS page 18

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

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

continued from page 5

NAVARRE Q&A

Navarre: There is quite a bit of excitement about it, but at the same time it's summertime on the Kenai Peninsula, so fishing and outdoor activities are taking precedent. AKLNG has purchased a lot of property and they are working through various designs for re-routing the spur highway and that is something that will have huge impact into the community.

We are monitoring that and there will be some hearings on that later this fall. That is a project, if they go forward with the FEED stage, they probably look at doing that project before the final investment decision gets made just because they want it in place before they start the construction. We are trying to anticipate what things we need to do immediately and what things we need to plan for in the long term.

Petroleum News: Getting back to your hiring Larry Persily, how has hiring Larry helped? I know he's only been there four months, so maybe it's a little early to say.

Navarre: The way it's helped is it gives us someone who can focus specifically on the various meetings, like even the changes that have to happen in the Legislature in order to go forward with the fiscal terms, and he's got experience with the Department of Revenue. He'll go to meetings that I would otherwise have to attend, including meeting with AKLNG, meeting with FERC folks, speaking to and meeting with other interested parties like he did when he was federal coordinator.

He's doing a lot of that same stuff for me. He's gathering that information. He's identifying some of the socio economic impacts. Having somebody like Larry is extremely valuable.

Petroleum News: Does it help to have someone who is welcome in any legislative office in the Capitol?

Navarre: Absolutely. He has a lot of credibility and I get to benefit from that both with AKLNG folks, with the Legislature and the administration. While it doesn't take up 100 percent of his time, we've got a few other projects we have him working on. Larry and I are also engaged with the state fiscal policy discussions.

Petroleum News: Knowing his position was going to be eliminated, were you surprised that he was available?

Navarre: You know, I was; I had hoped that he would be. When I first talked to him about it, I was wondering whether or not he would be willing to come to the Kenai Peninsula. We've known each other for a number of years and I think he was looking forward to continue working on the project, just in a little different capacity, but I think the latitude to work on other projects like fiscal policy was attractive to him, so it was a win-win.

Petroleum News: Larry's not the only one who has credibility in those halls. You've served 12 years. How do you think that can help you as you watch developments with AKLNG whether it's this fall or next year?

Navarre: You know I think we'll be able to play a significant role in analyzing. What I'm really interested in is what are the changes? What does it mean for the state long-term? Having Larry gives us that perspective It gives us a chance to brainstorm with each other about making sure we don't look out entirely for the state's interest at the expense of the Kenai Peninsula Borough because we are going to face significant impact and the tax changes going to be proposed, including the payment in lieu of taxes, all of that changes from the status quo. We have to be cognizant of what that means for us, but at the same time there is a statewide perspective that you have to keep in mind also. I think we are both capable of doing that.

Petroleum News: Gov. Walker noted in one of his press conferences that you came down here to soothe over some hard feelings between the Legislature and the governor. Talk about your visit here.

Navarre: I think that I enjoy as a former legislature and a current mayor, I have a good relationship with people on both sides of the aisle. I've been through the political battles before so that sometimes they are willing to listen to my perspective even if they don't always follow my advice, so it's the benefit of experience.

Petroleum News: You've got the outside looking in, but what do you think has changed in the Capitol from the time you were in office?

Navarre: I think we saw it changing even while I was in office. One of the things that's been frustrating for me at the state level and even at the national level, there is so much social media out there, that there is so many opportunities to have things misrepresented that creates additional political hurdles or even political perceptions that have to be overcome. Sometimes I think there is too much focus on that.

Petroleum News: Could that impede progress with AKLNG?

Navarre: Oh absolutely, I think it could because one of the things is there is a gubernatorial change. The state of Alaska has a very strong governor. There was momentum the previous administration had that this governor and his administration said — and rightly so — we need to complete our due diligence and review what's been done so we can determine whether or not we can continue this direction or whether we should change some things because there is a new governor. For some people that frustrates them because they are saying, what's he going to do.

At this point, he's just saying I'm going to review it. He wants to apply his experience with the people he hired to take a look at the terms of the negotiation, the equity interest — any of that. He might want to propose some changes. For some people they see that as a delay. It could cause and I think has caused some delay. But it's also part of our process and I think perfectly reasonable that he have the opportunity to complete his due diligence.

I think some legislators are frustrated by that because they sat through all of the hearings; they have been through all the discussions; they talked with the previous administration. There was much more consistency at the time. So it can be frustrating to change directions or put a hold on some things while you do a re-evaluation.

Petroleum News: What would your advice be to the Legislature and what would your advice be to the administration?

Navarre: My advice to the Legislature and the administration would be similar. Do what's best for Alaska. Keep an eye on the goal and make sure that we continue moving this project forward. Don't let the perfect be the enemy of the good.

Petroleum News: Have you seen that happen in Alaska once or twice?

Navarre: You know when I think of the fiscal policy, we can get so caught up in rhetoric and politics that it stops things from happening. That can be a concern because industry, they have certain timelines and timeframes and decision points they have to stick to because they answer to their shareholders. We need to be cognizant of that but also recognize we are the state of Alaska and just as they are looking out for their shareholders, we need to look out for our residents.

Petroleum News: Also in the forefront are oil prices. Have you seen this happen before?

Navarre: Absolutely. I got elected in 1984 so my first time in the Legislature was when we had the crisis of the mid-'80s — the price of oil dropped from $26 a barrel to $9 a barrel. We had special sessions and we went through an incredible economic downturn during that period, in the late '80s.

That was as a result of the same things we are seeing now. We have a big budget deficit. The first thing that goes is the spending on the capital projects and that's fine for short term, but long term it means you end up deferring on maintenance and things like that. And there is an impact on the economy.

That's why I think it's really critical for us to have a long-term fiscal plan, and the Legislature is going to have to buy into it. You can't get there by cutting the budget. Any new revenues are going to have political consequences for the administration and the Legislature. Just because they are tough choices doesn't mean they can be ignored. They can't be.

Petroleum News: We've heard this before that we need a long-term plan. Do you think Alaskans see it as a reality now?

Navarre: I think so. I think they will be even more aware of it over the course of the next year. The first year of budget cuts and spending some of the reserves that we have, and cutting the capital budget by $1.5 billion, or whatever the number was, you can do that in the short term, but in the long term that builds up an economy associated with it. If you just pull it out, that's going to have consequences. So will cuts to the operating budget. So will new taxes. When all if it is together with the price of oil between $50 and $70 over the course of the next year, it creates a lot of difficult financial choices.

In my view, there is no plan that doesn't work without using earnings of the Permanent Fund. So how do you get the public there when there has been so much political rhetoric and it's been a political football for so long and then for other new revenue, every single one of them has political as well as economic consequences? It will be easy for people to pick apart any plan that's out there. The real goal should be building

see **NAVARRE Q&A** *page 19*

continued from page 1

KITCHEN LIGHTS

ated with the facility now entering a pre-commissioning phase.

The heavy lift vessel MV Svenja has been putting the field's production platform in place about 10 miles northwest of Boulder Point, near Nikiski on the Kenai Peninsula. Work is still in progress cementing the skirt pilings on the seafloor around the platform's monopod caisson, Webb said. The placement of the topside decks onto the caisson, an operation now scheduled for Aug. 1 or 2, will depend on the cement hardening, a process that will take two days, he said.

Furie has previously said that it anticipates starting the testing of all of the equipment needed to operate the field, including conducting pressure testing of the gas pipeline, by the middle of August. Initial production will come from the Kitchen Lights No. 3 well that Furie drilled in 2013. However, commissioning of the field and its associated facilities is unlikely to start before November, given that Furie will need to install a workover rig on the platform for tying the production well into the subsea pipeline. Furie plans to start field production on Jan. 1, when the first of its gas supply contracts with its customers comes into play.

The gas pipeline from the Kitchen Lights platform has a maximum throughput capacity of 100 million cubic feet per day — Furie hopes for initial production of 85 million cubic feet per day. The company has indicated that the Kitchen Lights field could produce enough gas to feed two pipelines, each with a capacity of 100 million cubic feet per day. However, the company has deferred construction of a second pipeline until it can find customers to buy enough gas to justify the cost of that second line.

—ALAN BAILEY

Contact Alan Bailey at abailey@petroleumnews.com

continued from page 1

GAS OFFTAKE

owners of the Prudhoe Bay field will need to convince the AOGCC commissioners that there is a net economic advantage to the state in allowing that increase.

Essential step

It will be critical to the owners to obtain AOGCC approval before committing to the huge expense of the front-end engineering and design stage of the North Slope gas line project, sometimes referred to as the AK LNG project.

"Amendment of Rule 9 (the gas offtake limit) is being requested at this time in consideration of current actions by the State of Alaska and the AK LNG parties … to progress the AK LNG project to the front-end engineering and design (FEED) development stage, which effort involves the expenditure of billions of dollars," BP said in its application to AOGCC. "To move to the FEED stage of project activity, a number of project-enabling actions have been identified."

According to BP's application to AOGCC, Rule 9, adopted in 1977, limits the Prudhoe Bay natural gas offtake to a maximum average of 2.7 billion cubic feet per day. But, currently, only about 0.6 bcf per day of that allowed limit is actually used, primarily as a fuel for North Slope operations but also for minor local gas sales, the application says.

And, to-date, the recycling of gas through the field reservoir for enhanced oil recovery has contributed to an increase in total oil production from an initial estimate in 1977 of 9.6 billion barrels to a cumulative production to date of more than 12.2 billion barrels, the application says.

Higher offtake limit

The participants in the AK LNG project anticipate the start of major gas sales from the North Slope in 2025 — on May 28 the U.S. Department of Energy conditionally granted authorization for the export of LNG from the project to non-free-trade nations, the application to AOGCC says. But while, under the current gas offtake rule, some 2.1 bcf per day would be available for delivery to the gas pipeline system, net of gas used as fuel on the North Slope, the design of the LNG project assumes an average gas supply of 3.5 bcf per day to the project, the application says.

The AK LNG project anticipates about 75 percent of its required gas coming from the Prudhoe Bay field, with the remaining 25 percent coming from other sources, the application says. Under this scenario, the project would require a Prudhoe Bay gas offtake of about 3.3 bcf per day, including fuel gas, an offtake higher that the current limit of 2.7 bcf. The term "other sources" presumably references, in particular, the giant Point Thomson gas-condensate field that ExxonMobil is developing to the east of Prudhoe Bay.

However, to accommodate the risk of gas from those other sources not being delivered as expected, BP is asking authorization to meet all of the AK LNG project's gas needs from Prudhoe Bay gas production, should that prove necessary. That would require an average offtake of 4.1 bcf per day (3.5 bcf for the gas line project plus 0.6 bcf for fuel gas).

BP says that it has upgraded its field model for the Prudhoe Bay field since the AOGCC last considered the gas offtake limit for the field in 2007. There have also been changes to the inputs to the model, including updated production data, updat-

see **GAS OFFTAKE** *page 20*

continued from page 1

CONOCO ASSETS

BP said would allow it to focus on the Prudhoe Bay unit and the Alaska LNG project.

By contrast, independent companies including Hilcorp and Miller Energy Resources Ltd. have expanded their focus to include properties on the North Slope as well as Cook Inlet.

Beluga River

The two units ConocoPhillips is selling are among the oldest in the Cook Inlet basin and yet both are believed to have enough gas remaining to support years of production.

Standard Oil Company of California — working with Shell and Richfield Oil Corp. — discovered the Beluga River gas pool in December 1962 with the Beluga River Unit No. 1 while looking for oil in deeper formations on the west side of the Cook Inlet basin.

Production began in 1968, after Chugach Electric Association Inc. built the nearby Beluga River Power Plant that provides electricity to Anchorage. With a major pipeline in 1984, Enstar Natural Gas Co. connected the field to heating markets in Anchorage.

Through its predecessor ARCO, ConocoPhillips became operator of the Beluga River field in 1986. Today, ConocoPhillips, Hilcorp and Municipal Light & Power each own a one-third interest (33.33 percent) in the field and its facilities. ConocoPhillips holds a two-thirds interest (67.67 percent) in the deep rights beneath the gas producing intervals.

Gas production increased somewhat steadily until around 2006. A June 2004 study from the U.S. Department of Energy expected production to continue at approximately 53.2 billion cubic feet per year through 2007 and decline steadily through at least 2025.

ConocoPhillips spent at least $140 million at the field between 2008 and 2012. The program included drilling six wells (including three drilled in return for state support for an extension of its license to export LNG) and upgrading compression in an attempt to improve deliverability. Between mid-2012 and mid-2013, ConocoPhillips drilled the BRU 244-23, recompleted the 212-24T to stimulate shallower Beluga sands, planned six well turnarounds and began evaluating several projects to improve well performance.

In its most recent plan of development for the unit, ConocoPhillips described Beluga River as being "fully delineated." The Sterling reservoir had declined to 25 percent of its original pressure, down from 30 percent a year ago — deliverability has also declined.

Even so, the unit produced 25.1 billion cubic feet in 2014, up from 22.4 billion cubic feet in 2013, which suggests that recent maintenance activities at the field have been helpful.

North Cook Inlet

Pan American Petroleum Corp. discovered the North Cook Inlet Tertiary System Gas Pool in 1962 off the coast of the village of Tyonek with the Pan Am Cook Inlet State 17589 No. 1 exploratory well, which is known colloquially as Cook Inlet State No. 1.

The well famously blew out on Aug. 23, 1962, creating a flame large enough to see from Anchorage some 37 miles to the east. Pilots reportedly used the flare as a beacon.

Even though work on a relief well began a week later, it took Pan Am until October 1963, more than a year after the incident, to finally kill the well, in large part because winter ice flows in the Inlet prevented work from November 1962 until April 1963.

Pan Am drilled delineation wells through 1966 and mapped a pool covering some 8,000 acres. The company installed the Tyonek platform — the 12th in the Cook Inlet basin — in 1968. The platform was designed to withstand 80 mile per hour winds, 27-foot waves, temperature down to 40 below and 1,500-ton ice flows moving at 10 feet per second — the harshest conditions expected for the region. The company used "cluster spacing," rather than standard 640-acre spacing, to drain the entire reservoir from a single platform.

When production began in 1969, other fields were already serving the local market in Anchorage. The Kenai LNG terminal was built to export these additional supplies to Japan. Early forecasts expected the pool to serve the Japanese market for 20 to 30 years.

Instead, the field continues to supply the market today, some 46 years later.

The longevity comes from accessing previously overlooked reserves. In 1993, when ARCO Alaska was operating the North Cook Inlet field, the Alaska Department of Natural Resources attributed 468 billion cubic feet in remaining reserves. The estimate grew to 410 bcf in 1994, 358 bcf in 1995, 1 trillion cubic feet in 1996 and 1.075 tcf in 1997 before falling to 917 bcf in

see **CONOCO ASSETS** *page 20*

continued from page 16

OIL PATCH BITS

Alaska Native Tribal Health Consortium. Pohjola graduated from UAA with a degree in management.

Reelected to vice-chair is Paul George Guy. Robert L. Beans was voted in as secretary. Johnny Evan was voted in as treasurer.

Arctic Slope Regional Corp. announces acquisition

Arctic Slope Regional Corp. is pleased to announce the acquisitions of Arctic Pipe Inspection Inc. of Houston and Arctic Pipe Inspection Inc., collectively API. Headquartered in Houston, Texas, API was founded more than 40 years ago by Royce Roberts to provide non-destructive testing of oil country tubular goods. API currently operates facilities in Houston, Texas, and Deadhorse, Alaska, providing electromagnetic, ultrasonic, weldline and mill inspection services to oil and gas producers and service providers.

"This acquisition demonstrates ASRC's continued commitment to the oil and gas industry," said Rex A. Rock Sr., president and CEO of ASRC. "Over the last 40 years API has earned a reputation as a customer focused, value-added service provider. ASRC is committed to maintaining and building on API's reputation for superior customer service, while also facilitating opportunities for growth."

"Today is an exciting day for API and its employees," said Royce Roberts, API founder and retiring president. "I believe the combination of ASRC's financial support and relationships within the oil and gas industry will provide opportunities for growth and expansion of API's services."

Concurrent with the retirement of Royce Roberts, Jim Hildebrandt, API's long-time vice president of operations, assumed the role of API president and general manager.

continued from page 1

LNG HURDLE

sion, said the government has "arrived at a balanced approach that ensures we represent a competitive jurisdiction where proponents can invest and derive a fair rate of return, while at the same time ensuring that British Columbians who own the resource that lies at the heart of this industry receive a fair return for granting access to that resource."

He said the Pacific NorthWest partners wanted long term assurance over fiscal terms based on experiences elsewhere and secured protection in four categories: the LNG income tax, the natural gas tax credit, the carbon tax and on key aspects of greenhouse gas emission regulations.

Pacific NorthWest President Michael Culbert acknowledged British Columbia's recognition of "the globally competitive nature of the LNG industry, while simultaneously ensuring that the people of British Columbia receive their fair share of LNG benefits."

That assessment paralleled an analysis by the Canadian Energy Research Institute which says British Columbia LNG can be cost-competitive with other jurisdictions, including projects in the United States, Australia and Russia.

Culbert said the final regulatory element hangs on environmental approval from the Canadian government that is "being worked on diligently with First Nations, stakeholders and government representatives."

Review likely to extend

However, that review is likely to extend into the fall, pending an agreement on construction of a suspension bridge to an island near Prince Rupert where a marine terminal will be built for ocean-going LNG tankers.

Clark said the opposition New Democratic Party — which she labeled as the No Jobs Party — argued "from the very beginning that (Pacific NorthWest) would never happen. Every step of the way they said it was going to fail."

Greg Kyllo, a government member of the legislative assembly, joined his leader in ridiculing the NDP.

"This was a historic opportunity and the NDP yet again said no," he said. "The NDP haven't changed at all. They still don't get the importance of private sector job creation, nor do they want to say 'yes' to responsible economic development," he said.

NDP calls it 'a bad deal'

The NDP finds itself pulled in two directions by opposing the tax regime, but endorsing the Pacific NorthWest project.

"We believe we can go out and make the case that we're supportive of LNG ... but a bad deal is a bad deal," said Shane Simpson, the NDP spokesman for employment.

He conceded Clark's government will gain a stronger hand if the Petronas project goes ahead as proposed.

"If it becomes a discussion about C$36 billion, then we have a challenge," Simpson said. "If we can keep the debate and discussion around, 'Is this really a good deal for British Columbia or would we have done better?' then I think we're in a good place."

The NDP has gained support for its position from an unlikely source. Martyn Brown, who was chief of staff to Clark's Liberal predecessor Gordon Campbell, told The Province newspaper the tax deal is a "sellout" and a "giveaway" of British Columbia's natural resources.

He said that the "more people learn about this deal, the more angry they are about it," he said, urging the NDP to remain resolute.

"Do you think the NDP wanted to vote against this (agreement)? They didn't. They are actually pro-LNG. But they can't be too sensitive about pointing out a bad deal."

Brown wrote that "under no circumstances should we effectively consign our ability to set LNG-specific carbon taxes or to impose new environmental regulations aimed at curbing greenhouse gas emissions that will skyrocket because of that industry.

"Taxpayers should not have to foot the bill for strengthening such industry-specific measures and subsidizing company profits."

Alliance says terms not adequate

Separately, the British Columbia LNG Alliance stirred the debate by suggesting the terms of the agreement are not yet adequate.

"The government has more to do," said Alliance President David Keane. "I think there's more work to do in terms of making sure we are in fact globally competitive. There are things that can be done in terms of some of these taxes, like the provincial sales tax."

De Jong flatly rejected any chance of further sweetening the terms.

"We believe we have settled upon a taxation and a public policy and an environmental regulatory framework that strikes the right balance," he told reporters.

Bruce Ralston, the NDP spokesman for natural gas development, underscored the industry's plea for further relief during the legislative debate.

"Are these the opening positions in a new negotiation about forgiving the provincial sales tax for this facility?" Ralston asked.

De Jong said he had no intention of speaking "for what may be in the minds of someone else. But the answer from the perspective of the government is: No. We've made our position clear in terms of the (Pacific NorthWest) package that we believe meets the test for being balanced.

"But the government of British Columbia and I do not intend and are not prepared to provide specific provincial sales tax relief to the LNG sector."

On the issue of whether British Columbia can compete in the global LNG sector, de Jong said Petronas (and its four Asian partners) has already signed on to the project development agreement, which no caveats about needing further tax relief.

Ralston asked de Jong whether he had "received any word that further progress — in other words, advancing the project — depends on serious consideration by the government of reduction of the PST and a commitment to do that prior to them making a decision to proceed further?"

For a second time, de Jong insisted the answer was "No," arguing that the consortium's intentions were reflected in "the commercial investment decision that they have taken" by attacking their signatures to the agreement.

De Jong said the provincial sales tax would be a prime source of provincial revenue through the four-year construction phase, estimating the PST payable would be C$992 million.

But Keane, suggesting that the PST could pose an obstacle to other investors, noted that British Columbia is the only LNG jurisdiction that will impose a special LNG tax and a carbon tax.

"In places where we operate we don't have those taxes," he said, adding weight to the NDP's concern that the fiscal regime is not yet a closed matter. ●

Contact Gary Park through publisher@petroleumnews.com

continued from page 17

NAVARRE Q&A

toward a consensus plan because we are all in this together.

Petroleum News: Speaking of budgets, one of the hot-button issues was delaying tax credit payments. Cook Inlet has been figured into the use of tax credits. What are your thoughts on these?

Navarre: My thoughts on tax credits are that I've never been a strong proponent of tax credits. I think they can work if they are targeted, limited and for a defined period of time so you can measure what the impacts are. There is no question tax credits can generate a lot of economic activity and in Cook Inlet, we've seen a lot of it. What's a little tougher to define is how much of it may or may not have taken place because the price of oil was high when the tax credits were being offered. I think there is a place for tax credits but I think they need to be better defined.

Petroleum News: OK, so you've got a little over two years left in your final term. What would you like your legacy to be as you close out?

Navarre: I guess I've always been an advocate for responsible resource development so I hope the role I play at both the state level and here locally is one that doesn't impede progress and the major project going forward. At the same time, it's responsible structure for the residents of the state of Alaska and Kenai Peninsula Borough. Further, I want to make sure I leave the borough well managed with good people in place and financially sound. I think that is where we are now. ●

Contact Steve Quinn at squinnwrite@gmail.com

continued from page 18

CONOCO ASSETS

2000. The increased estimates prompted two nearby leaseholders to petition regulators to add their leases to the unit. The request set off a decade-long legal challenge that ended in 2006, when the Alaska Supreme Court ruled in favor of ConocoPhillips and kept the leases separate from the North Cook Inlet unit.

The June 2004 U.S. Department of Energy study predicted the field could produce another 598.4 bcf. A forecast envisioned production holding at 57.3 bcf per year through early 2009, when rates would begin declining at about 15 percent per year until they reached about 2 bcf per year at some point beyond 2025.

In reality, gas production from the North Cook Inlet field remained consistent — at some 100 million cubic feet per day — only through 2005, when rates began declining.

In 2008 and 2009, as part of the same deal to secure state support for the LNG export license, ConocoPhillips spent $75 million drilling three wells at the unit. The wells proved to be disappointing and investment has since been limited to maintenance work.

One avenue of potential investment is the oil prospects below the gas producing intervals. These were an important part of the legal challenge in 1996 and emerged again in 2013 when Buccaneer Energy Ltd. acquired deep drilling rights for oil from ConocoPhillips and made plans to explore. Bankruptcy proceedings ended those efforts. ●

Contact Eric Lidji
at ericlidji@mac.com

continued from page 18

GAS OFFTAKE

ed drilling information and updated fuel-gas algorithms, the company says. The Prudhoe Bay working interest owners presented results from the upgraded model to AOGCC staff in April and May of 2015 and included an assessment of these results in a confidential appendix to the injection order modification application, BP says.

Carbon dioxide

BP is also asking for permission to inject into the Prudhoe Bay field reservoir the large volumes of carbon dioxide that the AK LNG project anticipates separating from North Slope gas, using a plant that will need to be built to treat gas earmarked for export. Untreated Prudhoe Bay gas contains about 12 percent carbon dioxide.

The company's application to AOGCC says that it is applying for authorization to inject additional carbon dioxide into the Prudhoe Bay reservoir at the same time as applying for the increased gas offtake since both applications are tied into the requirements of the AK LNG project. The application says that the injection of carbon dioxide is a key part of the implementation of major gas sales from Prudhoe Bay, a development that will result in the recovery of the equivalent of about 3.8 billion barrels of oil from the field.

The application also says that the injection of carbon dioxide into the Prudhoe Bay reservoir is already permitted as part of regular gas cycling operations in the field — the new request asks for permission to inject incremental carbon dioxide delivered to the planned gas treatment plant from fields other than the Prudhoe Bay field itself.

BP's analysis and assumptions relating to carbon dioxide injection are contained in a confidential appendix to its application to AOGCC for the injection approval. However, in the public section of the application the company says that there are no subsurface sources of freshwater inside the Prudhoe Bay unit that might be impacted by the carbon dioxide. Injection would only be allowed into specified rock strata and there would be requirements for periodic mechanical integrity testing and for the monitoring of injection wells, the application says.

AOGCC has scheduled a public hearing to review BP's application on Aug. 17 at the Anchorage Legislative Information Office. ●

Contact Alan Bailey
at abailey@petroleumnews.com

continued from page 1

DRILLING FLEET

village of Wainwright, is known to contain a major pool of natural gas: Shell hopes to find oil under the gas. According to Shell's plan of exploration, the J well is in the southwest quadrant of the prospect.

Permits in place

Shell has all of the permits that it needs to start drilling. However, the company's drilling permits, issued by the Bureau of Safety and Environmental Enforcement, do not allow drilling into potential hydrocarbon zones because Shell's Arctic capping stack has not yet been staged in the Chukchi Sea. The capping stack, which could be used to seal a leaking well head in the event of a loss-of-well-control incident, is being carried by the icebreaker M/V Fennica — the Fennica is currently in Portland, Oregon, under repair, having suffered a gash it its hull after departing the port of Dutch Harbor in the Aleutian Islands in early July.

Shell has said that it will be possible to repair the Fennica and transition the vessel to the Chukchi before any drilling operations reach the depths where hydrocarbons may be encountered.

Uncharted obstacle

It appears that the damage to the Fennica resulted from the vessel scraping an uncharted undersea obstacle while under the guidance of a certified marine pilot. On July 28 the U.S. Coast Guard issued a notice saying that it had submitted its initial findings on the incident to the Coast Guard headquarters for review. The Coast Guard said that it had found that the navigational charts on the Fennica were all up to date and that drug testing of the vessel's master, mate and pilot had all proved negative.

Following the Fennica incident, the National Oceanic and Atmospheric Administration arranged a marine survey of the area where the incident appeared to have taken place. That survey discovered rocky areas at depths of less than 30 feet, including an uncharted shoal as shallow as 22.5 feet.

The Coast Guard notice said that the Fennica's draft at the time of the incident was 26.25 feet and that the agency had broadcast a notice to mariners, notifying them of the location of the previously uncharted shoal.

Greenpeace protest

Meantime, protests by environmentalists against Shell's Arctic offshore drilling program continue unabated. Protestors argue that oil exploration and development in the Arctic offshore presents too high a risk to the fragile Arctic environment and that techniques for responding to an Arctic offshore oil spill are unproven. On July 29 environmental activist organization Greenpeace issued a press release saying that protestors had rappelled off a bridge over the Willamette River in an attempt to block the Fennica from leaving Portland.

Shell has requested the federal District Court in Alaska to issue an order requiring Greenpeace to comply with a preliminary injunction that the court had previously issued, banning Greenpeace from interfering with vessels in Shell's fleet. Shell has asked the court to fine Greenpeace $2,500 per hour until the protestors vacate the Portland bridge. Shell pays a daily rate of $59,288 for the use of the Fennica, the company told the court.

On March 27 the National Petroleum Council, an advisory body to the Secretary of Energy, issued a report recommending to the Obama administration that exploration in the Alaska Arctic offshore should proceed without delay to stave off a likely future decline in U.S. oil production. Proven technologies exist that can enable this exploration to move ahead, the report said.

—ALAN BAILEY

Contact Alan Bailey
at abailey@petroleumnews.com