



Walsh resigns as oil, gas director; Oil Search moving to BP building

CHANTAL WALSH HAS RESIGNED as director of the state of Alaska's Division of Oil and Gas, effective March 1. She is leaving for personal reasons, as she is needed at Petrotechnical Resources of Alaska, or PRA, a consulting firm she and her husband Tom Walsh co-founded in 1997.

James "Jim" Beckham, deputy director of the division, will be staying, Walsh told Petroleum News Feb. 13.

A life-long Alaskan, Walsh joined the division as director on Nov. 28, 2016.

"It has been my honor to serve the state of Alaska. It has

see **INSIDER** page 11



Governor moves to dismiss French; dispute over authority of AOGCC?

Much is still unknown about the hearing on Gov. Mike Dunleavy's move to oust Hollis French, the current chair of the Alaska Oil and Gas Conservation Commission.

It was a three-day "public" hearing which began Feb. 6, but only the third day appears to have been reported, after Alaska Public Media obtained a Jan. 17 letter from Dunleavy to French listing "potential grounds for your removal from office for cause." "For cause" is the only way an AOGCC



HOLLIS FRENCH

see **FRENCH OUSTER** page 11

Oil Search reports Pikka B sidetrack started; Pikka C progressing

Oil Search has published a status report for its winter appraisal drilling program in the Pikka unit on Alaska's North Slope. The company is drilling wells to evaluate a major oil pool that it plans to develop in the Nanushuk formation. The wells involved are the Pikka B and sidetrack at the southern end of the unit, and the Pikka C in the central part of the unit. Oil Search has planned to drill sidetracks from both the B and the C wells. The idea is to further appraise the subsurface reservoir, prior to the start of front-end engineering and design for the development project.

Pikka B well

Oil Search's report says that the specific objective of the Pikka

see **PIKKA WELLS** page 10

IGU board approves another cost increase for Fairbanks LNG tank

There has been a further increase in the cost of building a large liquefied natural gas tank in Fairbanks, as part of a project to bring an expanded natural gas supply to the city. The Interior Gas Utility is constructing the tank as part of the Interior Energy Project, sponsored by the Alaska Industrial Development and Export Authority.

Construction of the 5.25 million-gallon tank began in December 2017, with the intent of completing the tank by the end of this year, to qualify for a state tax credit. The estimated cost was \$48.7 million. However, while the construction of the tank itself moved forward, work on support facilities such as pumping systems, vaporizing systems and facilities for unloading tankers

see **FAIRBANKS LNG** page 10

EXPLORATION & PRODUCTION

Facts you need...

From Interior about ANWR 1002 oil potential before bidding on leases

By KAY CASHMAN

Petroleum News

Although recent news reports suggest a partial 3-D seismic survey might still be shot this winter in the ANWR 1002 area, the odds of that happening are slim. That said, there is other valuable geologic information coming from Interior's U.S. Geological Survey that will help bidders in the upcoming ANWR 1002 lease sale to better understand the oil potential of the region.

The effort is spearheaded by David Houseknecht, a long-time USGS expert on north-



DAVID HOUSEKNECHT

ern Alaska petroleum geology.

The agency has completed a ground-up reprocessing of 1,451 line miles of vintage 2-D seismic data collected from the ANWR 1002 area in 1984 and 1985. The purpose was to tease out more detail than was apparent in the initial data.

The 2-D survey was shot by WesternGeco and funded by a consortium of companies led by Exxon. Some of those companies have since disappeared in mergers; the 11 that are left include Anadarko, BP, Chevron, ConocoPhillips,

see **ANWR FACTS** page 12

EXPLORATION & PRODUCTION

Well integrity examined

BP provides testimony to AOGCC on the condition of wells in Prudhoe Bay field

By ALAN BAILEY

Petroleum News

Following incidents involving oil and gas leaks at the wellheads of two wells in the Prudhoe Bay field, the Alaska Oil and Gas Conservation Commission is conducting an inquiry into the overall integrity of wells in the field. BP has filed testimony with the commission regarding the well integrity issue. And on Feb. 13 the commission held a public hearing on the issue.

The leaks that triggered the inquiry involved two wells on Drill Site 2 in the field. One of those leaks was from the wellhead of well 02-03 in April 2017. The other was from the wellhead of well 02-02 in December 2018. The commission is concerned that these two incidents may reflect a more

While a well that may be susceptible to sustained casing pressures is monitored daily, experienced well integrity engineers use a number of parameters to assess whether the well can safely continue to operate.

general issue relating to the mechanical integrity of wells in the field.

Anchala Klein, BP Alaska vice president for wells, told the commission during the hearing that the actions that BP has taken following the first incident had been insufficient to prevent the second incident.

see **WELL INTEGRITY** page 8

GOVERNMENT

Notley alienates producers

Imperial, Suncor criticize strategy curtailing output in hopes of price increase

By GARY PARK

For Petroleum News

Alberta Premier Rachel Notley is coming under intense fire from two of her province's leading oil producers as she wrestles with a problem of her own making.

Now in the second month of her strategy to curtail production in hopes of drawing down storage levels to protect the value of Canada's resources, Notley has revised the targeted cutback to 250,000 barrels per day from the 325,000 bpd she imposed in January.

"We're not out of the woods yet, but this temporary measure is working," she said in a state-



RACHEL NOTLEY

ment. "We will adjust these production levels as necessary going forward."

Bolstering her case was a significant drop in the price differential between Alberta's heavy crude and benchmark U.S. prices over the past two months to US\$10 a barrel from US\$50.

Imperial, Suncor in opposition

Industry association spokesmen found some comfort in this softening approach, but the chief executive officers of Imperial Oil and Suncor Energy were less swayed.

Imperial's Rich Kruger reiterated his compa-

see **PRODUCERS CRITICAL** page 9

● PIPELINES & DOWNSTREAM

Alberta 'back in business'

Pembina and a Kuwait company join forces to advance C\$3.5B petrochemical facility, taking advantage of liquids rich Montney formation

By **GARY PARK**
For *Petroleum News*

Alberta is now close to turning the tables after years of ceding petrochemical investment to the United States with an announcement from Pembina Pipeline that it is proceeding with a new C\$4.5 billion facility near Edmonton.

In partnership with a Kuwait company, Pembina said the plant will convert 23,000 barrels per day of propane into 550,000 metric tons of plastic products from food containers and consumer electronics to automobile parts.

The word "reaffirms that Canada and Alberta, in particular, have gone back to their place as a globally significant chemical producers," said Bob Masterson, chief executive officer of the Chemistry Industry Association of Canada, adding "this reconfirms that Alberta is back in business."

Subject to environmental and regulatory approvals, the facility will start operations by mid-2023, employing 3,000 people during the construction phase and with full-

time employment for 200.

Work is already underway on Inter Pipeline's C\$3.5 billion Heartland Petrochemical Complex, also in the Edmonton area.

Royalty tax credits

The Pembina project will receive C\$300 million in Alberta royalty tax credits, compared with C\$200 million for the Heartland venture — both the result of incentives announced by the government of Premier Rachel Notley in late 2016 to spur new energy infrastructure investments.

In addition, Western Canada has an oversupply of propane, resulting from "unprecedented growth in liquids-rich drilling" across North America, Pembina said.

Alberta is currently offering C\$2.1 billion in additional loan guarantees, grants and royalty credits to attract new plants, as well as new natural gas midstream projects.

Economic Diversification Minister Deron Bilous said the province has a short list of proposals that he expects to

will result in early announcements.

Masterson said his industry is "thrilled" by the Pembina decision which continues a "winning streak in the last 12 months in which we're seeing over C\$8 billion invested in Alberta and over C\$10 billion in Canada. We're now back in the game."

To those who question the validity of Alberta's strategy to compete with other jurisdictions, he said the unwillingness in the past by governments to participate caused Alberta to miss out on potential petrochemical developments, such as more than 300 global-scale projects that were drawn to the United States.

US incentives higher

Allan Fogwill, chief executive officer of the Canadian Energy Research Institute, said U.S. incentives are higher than Alberta's, with Royal Dutch Shell's facility in Pennsylvania scheduled to receive C\$1.6 billion over 25 years.

see **PETROCHEM INVESTMENT** page 4

contents

Petroleum News

Alaska's source for oil and gas news

ON THE COVER

Facts you need...

A about ANWR 1002 oil potential before bidding on leases

SIDEBAR, Page 12: Brookian shows promise to east

Well integrity examined

BP provides testimony on condition of wells in Prudhoe Bay field

Notley alienates producers

Imperial, Suncor criticize curtailing output in hopes of price increase

Oil Patch Insider: Walsh resigns as oil, gas director; Oil Search moving to BP building

Governor moves to dismiss French; dispute over authority of AOGCC?

Oil Search reports Pikka B sidetrack started; Pikka C progressing

IGU board approves another cost increase for Fairbanks LNG tank

EXPLORATION & PRODUCTION

6 PODs submitted for Redoubt, West McArthur

Glacier Oil and Gas outlines plans of development over next year for two small Inlet fields operated by Cook Inlet Energy

7 Division of O&G lists future data releases

7 One-year extension for Guitar unit drilling

7 US drilling rig count at 1,049, up by 4

FINANCE & ECONOMY

3 Alaska job losses slow, population down

February Economic Trends article points to recession tapering, but migration into state falling in wake of 2014 oil price crash

SIDEBAR, Page 3: Winners and losers in Alaska's economy

4 EIA forecasts higher volumes, lower prices

10 Petroleum property tax revenue in play

GOVERNMENT

7 Boutin named AIDEA executive director

LAND & LEASING

8 Date set for spring oil & gas lease sales

PIPELINES & DOWNSTREAM

2 Alberta 'back in business'

Pembina and a Kuwait company join forces to advance C\$3.5B petrochemical facility, taking advantage of liquids rich Montney formation



SOURDOUGH
moving freight since 1898
EXPRESS

Dependable Service Since 1898
Visit www.SourdoughExpress.com

• FINANCE & ECONOMY

Alaska job losses slow, population down

February Economic Trends article points to recession tapering, but migration into the state falling in wake of 2014 oil price crash

By **ALAN BAILEY**
Petroleum News

The lead article in February's Alaska Economic Trends, published by the Alaska Department of Labor and Workforce Development, indicates that the rate of job losses in the state is slowing, as the recession that followed the 2014 oil price crash works its way through the economy. But since 2013 about 35,000 more people have left the state than have moved to the state, with a net out-migration having happened in each of those six years, Dan Robinson, economist and chief of Research and Analysis, said in "4 Things to Know in 2019, Understanding Alaska's big picture three years into recession."

Since the job count peaked in 2015, there has been a cumulative total loss of 12,700 jobs, with the result of returning the overall job count to the level last seen in March 2011. The Anchorage area has been particularly hard hit, given the high concentration of oil and gas related employment in the city. For similar reasons there have been relatively high job losses in the North Slope Borough, Fairbanks, Juneau and on the Kenai Peninsula.

On the other hand, some parts of the state, in particular the Matanuska-Susitna Borough, have seen job gains. Most of these gains can be attributed to the expansion of health care services. However, the Mat-Su Borough has also seen significant population growth, Robinson said.

Issues the state government has been facing in dealing with its fiscal woes have impacted all state residents to some extent, he said. While Permanent Fund dividends have been altered, state-funded services face an uncertain future.

Fewer moving to Alaska

Robinson said that, although starting in 2012 there have been relatively high numbers of people leaving the state each year, the overall population decline can be more attributed to a steady fall in the number of people migrating into the state. Also, until 2017 the relative excess of

births over deaths in the state more than compensated for the migration-related population loss.

With job availability often being a prime motive for people to migrate between states, the job losses in Alaska would likely have deterred some people from moving to the state. On the other hand, with an older, rooted population in Alaska when compared with the state's previous major recession in the 1980s, people have been more reluctant to leave the state than previously: That likely explains the robustness of the state's housing market during the current recession, Robinson said.

The current negative migration trend is worrying, especially if it persists, he said, as an extended loss of population would raise issues regarding decisions being made over size of state government, how the government is funded, and the future of the Permanent Fund and the Permanent Fund dividend.

Economy falling behind

After having an economy stronger than the U.S. as a whole between 2008 and 2012, Alaska's economy started slipping down the ranking tables, even before the start of job losses in 2015. Over the past three years, no state has lost a higher percentage of jobs than Alaska, while all but three states have seen job gains, Robinson said. North Dakota and Wyoming, states that like Alaska depend heavily on oil revenue and jobs, have been the only other states with notable job losses, although North Dakota's economy resumed growth by mid-2017, while Wyoming's started to grow again by mid-2018.

States such as Texas and Oklahoma that have major oil production also have more diversified economies and have thus been able to absorb the oil price fall without an overall loss of jobs, he said.

The unusual length of the recession in Alaska is attributed to structural shifts taking place in the state's economy, Robinson noted, with Alaska being in "an

see **ECONOMIC TRENDS** page 4

Winners and losers in Alaska's economy

Included in the February issue of Alaska Economic Trends, published by the Alaska Department of Labor and Workforce Development, state economist Neal Fried provided an analysis of employment sectors that have particularly grown or shrunk in Alaska since 1990. Although the last few years have seen overall job losses in the state, since 1990 overall employment has grown by 35 percent. But within that overall picture, there have been winners and losers.

Health care booming

Securely heading the winners' rostrum for job gains comes health care services, in particular all forms of out-patient services, but with hospital services also at the top of the list. In fact, health care accounts for more than 30 percent of the state's overall job gains, Fried wrote.

Restaurants also came high on the list, with a gain of 8,053 jobs, a 77 percent increase since 1990. Jobs in local government, including K through 12 schooling, increased by about 9,000. The tourism industry also saw major gains, with the number of cruise ship passengers, for example, doubling between 1995 and 2017. Mining has grown, with jobs in that industry increasing from 933 in 1990 to 2,465 in 2017, Fried wrote.

Global trade transportation through Anchorage International Airport has increased substantially over the years, making this airport the busiest in the country in terms of landed cargo weight. Cargo carriers such as UPS and FedEx have increased their total workforce in Alaska from 957 to 2,265.

Other industries that have seen notable job gains include care services for the elderly, and computer systems design, Fried wrote.

Federal government job losses

At the top of the losers list comes civilian work for the federal government — federal employment peaked in 1993 but has declined steadily since then, perhaps as a result in part from an initiative to reduce the federal government's size. Another factor has been the privatization of some government services, such as services in the Alaska Native health care system, Fried wrote.

Forestry and logging in Alaska have also seen major job losses, as a consequence of changing federal timber policies and competition in the industry. Logging employment reached 4,000 in 1989 but had slumped to just 220 total jobs by 2017.

Thanks to job losses of around 4,000 in the oil industry during the recent recession, some oil-related industries appear in the list of job losers. Oil industry employment peaked in 2015, Fried wrote.

Legal services came quite high in the job losses count for Alaska, despite seeing modest job gains elsewhere in the United States. Many of the losses in Alaska have related to employment for legal support staff, rather than for lawyers. And legal work associated with the Exxon Valdez disaster inflated the 1990 job count.

Traditional media, such as newspapers, have seen job declines in Alaska, as has been noted elsewhere in the country. And, curiously, unlike restaurants, bars in Alaska have seen job declines — Fried suggested that the standalone bars represented by this data have lost out to competition from establishments that also serve food.

The growing use of informal clothing has hit dry cleaning and laundry services. And the widespread use of the Internet has hit employment in the travel reservation business, Fried wrote.

—ALAN BAILEY

AK Lofts Luxury Condominiums



Luxury Corporate Housing in the Heart of Anchorage.

- FULLY FURNISHED, MOVE IN READY.
- CABLE & HIGH SPEED INTERNET.
- ALL UTILITIES INCLUDED.
- LARGE HEATED GARAGE.
- 24 HOUR ON CALL MAINTENANCE.

907 562-0291
907 884-3073

Ask for 'AK Lofts'
or go to Aklofts.com



BUILDING ALASKA
FOR MORE THAN *38 years*

Experts in Resource Development and Heavy Civil Construction



Cruz Construction | Specialized Transport & Rigging

Alaska Interstate Construction | Cruz Energy Services | Cruz Marine

A CIRI Company

A CIRI Company

● FINANCE & ECONOMY

EIA forecasts higher volumes, lower prices

US production estimated at 12 million bpd for January, expected to hit 13 million bpd in 2020, but Brent down \$10 from January 2018

By **KRISTEN NELSON**

Petroleum News

Forecasts for Brent and West Texas Intermediate crude oil spot prices for this year and next are down in the February Short-Term Energy Outlook from the U.S. Energy Information Administration, while forecasts of U.S. crude oil production are up — both in comparison to the EIA's January forecasts.

EIA said Brent and West Texas Intermediate are now forecast to average \$62 per barrel and \$58 per barrel, respectively, in 2020, down \$3 from the January forecast, with the lower price reflecting “the expectation of looser global oil market balances in 2020 compared with last month's outlook.”

Global oil supply was revised up for 2020, the agency said, “largely as a result of higher forecast crude oil production in the United States,” with U.S. crude oil production forecast to average 12.4 million barrels per day this year and 13.2 million bpd in 2020, both up 300,000 from the January forecast, reflecting “an assumption of more productive wells both in the Permian Basin and in the Gulf of Mexico.”

EIA said the increases were the result of “incoming data during the month,” and the agency's assumption that pipeline constraints in the Permian basin do not moderate production growth as much as previously thought.



LINDA CAPUANO

EIA Administrator Dr. Linda Capuano said the February outlook “revises the forecast for U.S. crude oil production in 2019 and 2020, expecting increased growth during both years. U.S. production is on pace to average 13 million barrels per day in 2020, which puts the nation on track to set a new production record for a third consecutive year.”

Permian, Gulf of Mexico

“Continuing growth from the Permian Basin and the Gulf of Mexico helped U.S. crude oil production exceed 12 million barrels per day on average in the first month of the year, according to the February outlook,” Capuano said.

EIA said that estimated 12 million bpd average is an increase of 90,000 bpd from December. The agency is now forecasting U.S. production to average 12.4 million bpd in 2019 and 13.2 million bpd in 2020, “with most of the growth coming from the Permian region of Texas and New Mexico.”

Prices

EIA said that following two months of oil price declines, crude prices increased throughout January and into February “as global oil supplies declined relatively quickly.”

The agency said the agreement by the Organization of the Petroleum Exporting Countries and non-OPEC nations to reduce production by 1.2 million bpd began in January, and Saudi Arabia said it was reducing production by more than originally agreed. There have also been unplanned supply outages which reduced Libyan production from 1.2 million bpd down to some 800,000 bpd in November, as

well as production restraints in Alberta, which the agency said it estimates contributed to a decline in Canadian supply of some 400,000 bpd. EIA said there was no immediate loss to global availability from the U.S. sanctions in late January on Venezuela's state-owned oil company, PDVSA, but the sanctions “may disrupt regular trade flows and increase the risk for an oil supply outage.”

The agency said an expectation for lower demand contributed to falling prices in December but may have ebbed somewhat in January.

Supply

EIA said that while there are forecasts of global oil inventory draws in February, along with lower forecast OPEC oil production compared to January, it “forecasts that U.S. crude oil production growth will offset decreases in OPEC production throughout the forecast.”

Reductions in oil production affect different qualities of oil, the agency said, with reductions from OPEC, Canada and the threat of Venezuelan disruptions “likely increasing the price of medium and heavy crude oils compared with light crude oils,” because those countries tend to produce crude oil with higher sulfur content.

The agency said the price of Mars — a medium, sour crude produced in the U.S. Gulf — has increased compared to light, sweet oils.

US companies

EIA said publicly traded U.S. exploration and produc-

see **EIA FORECAST** page 7

SUBSCRIBE to Petroleum News

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

Petroleum
NEWS

www.PetroleumNews.com

Kay Cashman	PUBLISHER & FOUNDER
Mary Mack	CEO & GENERAL MANAGER
Kristen Nelson	EDITOR-IN-CHIEF
Susan Crane	ADVERTISING DIRECTOR
Heather Yates	BOOKKEEPER
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Alan Bailey	SENIOR STAFF WRITER
Eric Lidji	CONTRIBUTING WRITER
Gary Park	CONTRIBUTING WRITER (CANADA)
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Forrest Crane	CONTRACT PHOTOGRAPHER
Renee Garbutt	CIRCULATION MANAGER

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

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. 24, No. 7 • Week of February 17, 2019
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.

continued from page 3

ECONOMIC TRENDS

already long and messy transition” away from almost total dependence on oil-related revenue for the funding of state government. The state moved, in 2018, to tap earnings from the Permanent Fund as a revenue source, with much work remaining to be done in balancing the

state's finances.

All possible ways of bringing the state's fiscal situation into balance have advantages and disadvantages. But, unless some difficult decisions are made, the Alaska economy will continue to struggle, Robinson said. ●

Contact Alan Bailey
at abailey@petroleumnews.com

continued from page 2

PETROCHEM INVESTMENT

He noted that Alberta did not lead other jurisdictions into the incentive game, “but everyone is playing it.”

Bilous insisted the incentives help level the playing field, without becoming “corporate welfare.”

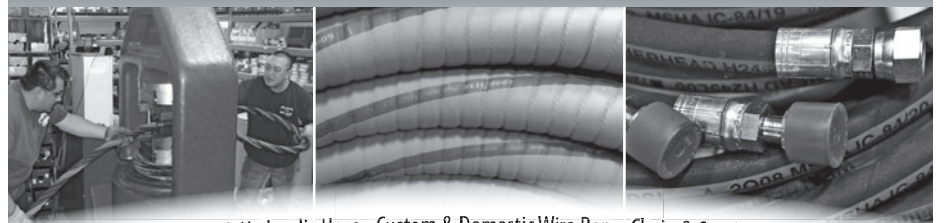
Abdullatif Al-Farhoud, chief executive officer of Petrochemical Industries Co. of Kuwait, Pembina's partner, said the deal will help his company add to its long-term supplies of petrochemical feedstock in Alberta.

The propane feedstock will come from the Montney formation, which straddles the northern Alberta and British Columbia border, which RS Energy director Samir Kayane said “has the potential to overwhelm any reasonable demand growth scenario that you throw at it.”

He said the Montney in 2017 and 2018 has added about 22,000 bpd of new propane supply, almost meeting the expected demand of the Pembina plant. ●

Contact Gary Park through
publisher@petroleumnews.com

Alaskan Grade Products FOR EVERY JOB



• Arctic Graded Industrial & Hydraulic Hose • Custom & Domestic Wire Rope, Chain & Synthetic Sling Fabrication
• Hydrostatic Pressure Testing & Certification • Low Temp Petroleum Handling Equipment
• Oilfield Fittings & Accessories • Sheet Rubber, Gasket Material & Adhesives

Proud to be Employee Owned.

A&G
Alaska Rubber Group

Alaska Rubber
& RIGGING SUPPLY

ANCHORAGE • FAIRBANKS • KENAI • WASILLA

www.alaskarubber.com • Toll Free: 800-478-7600



Congratulations

Congratulations Oil Search & Armstrong!



Keiran Wulff



Bill Armstrong

It is good news for Alaska when two of our most active North Slope players put together yet another major exploration play; in this case your 50/50 deal on the 195,200-acres block of leases on the eastern North Slope. Wishing you the best of luck in your hunt for oil...

- Afognak Leasing LLC
- Airgas, an Air Liquide company
- AK Loft
- AK Supply, Inc.
- Alaska Energy Services, LLC
- Alaska Dreams
- Alaska Frac Consulting LLC
- Alaska Frontier Constructors (AFC)
- Alaska Marine Lines
- Alaska Materials
- Alaska Railroad
- Alaska Rubber & Rigging Supply Inc.
- Alaska Steel Co.
- Alaska Tent & Tarp
- Alaska Textiles
- Alaska West Express
- Alpha Seismic Compressors
- American Marine
- Arctic Controls
- ARCTOS Alaska, Division of NORTECH
- Arctic Slope Telephone Assoc. Coop (ASTAC)
- Armstrong
- ASRC Energy Services
- AT&T
- Avalon Development
- Aviator Hotel
- Bombay Deluxe
- BP
- BrandSafway Services
- Brooks Range Supply
- Calista Corp.
- Carlile
- Chosen Construction
- Colville Inc.
- Computing Alternatives
- CONAM Construction
- Cruz Construction
- Denali Universal Services (DUS)
- Doyon Anvil
- Doyon Associated
- Doyon Drilling
- Doyon, Limited
- exp Energy Services
- F. R. Bell & Associates, Inc.
- Fairweather
- Flowline Alaska
- Fluor
- Foss Maritime
- Frost Engineering Service Co. - NW
- Fugro
- G COMM
- Geotemps
- GMW Fire Protection
- Greer Tank & Welding
- Guess & Rudd, PC
- ICE Services, Inc.
- Inspirations
- Jacobs
- Judy Patrick Photography
- Little Red Services, Inc. (LRS)
- Lounsbury & Associates
- Lynden Air Cargo
- Lynden Air Freight
- Lynden Inc.
- Lynden International
- Lynden Logistics
- Lynden Transport
- Mapmakers of Alaska
- Maritime Helicopters
- Motion & Flow Control Products
- Nabors Alaska Drilling
- Nalco Champion
- NANA WorleyParsons
- NEI Fluid Technology
- Nordic Calista
- North Slope Telecom
- Northern Air Cargo
- NRC Alaska
- Oil Search
- Opti Staffing
- PENCO
- Petro Star Lubricants
- Petroleum Equipment & Services, Inc.
- PRA (Petrotechnical Resources of Alaska)
- Price Gregory International
- Raven Alaska – Jon Adler
- Resource Development Council
- SAExploration
- Security Aviation
- Sourdough Express
- Summit ESP, A Halliburton Service
- Tanks-A-Lot
- The Local Pages
- TOTE – Totem Ocean Trailer Express
- Udelhoven Oilfield System Services Inc.
- Volant Products
- Weston Solutions

• EXPLORATION & PRODUCTION

PODs submitted for Redoubt, West McArthur

Glacier Oil and Gas outlines plans of development over next year for two small Cook Inlet fields operated by Cook Inlet Energy

By **KRISTEN NELSON**
Petroleum News

The Alaska Department of Natural Resources, Division of Oil and Gas, has received new plans of development from Glacier Oil and Gas for the Redoubt and West McArthur River units, both operated by Cook Inlet Energy, a Glacier company.

They are among the smaller fields in Cook Inlet: Alaska Oil and Gas Conservation Commission data for December, the most recent available, show that Redoubt averaged 1,310 barrels per day in that month; West McArthur River averaged 646 bpd.

Plans indicate work to keep the fields producing; West McArthur River POD notes that Glacier is continuing to permit drilling plans for the Sabre prospect.

Redoubt

The Redoubt unit was formed by

The company also said it continues to permit drilling plans for the Sabre prospect, which would be drilled from a jack-up rig, likely the Spartan 151. Glacier said it is seeking partners in Sabre.

Forcenergy Inc. in 1997; it reached sustained production in 2002. Glacier's predecessor, Miller Energy Resources Ltd., acquired Redoubt in late 2009 and undertook redevelopment efforts between 2010 and 2013.

The new Redoubt POD is the 19th for the unit and covers May 1 of this year to April 30, 2020.

Reporting on work accomplished under the 18th POD, Glacier told the division it had proposed examining results of current and planned enhanced recovery waterflood and converting additional nonpro-

ducing wells to waterflood if appropriate; drilling and stimulating a sidetrack of the RU-4a wells for use as waterflood injection; and changing out the failed electric submersible pump in the RU-9 well and stimulating that well as needed.

Glacier said it monitored Redoubt waterflood daily but did not complete the sidetrack of RU-4A, deferring that project to the second quarter of 2019. It deferred changing out the failed ESP in the RU-9 well to the third quarter of 2020.

For the 19th POD, Glacier said it plans to sidetrack the RU-6 and use it as a water injection well, work which would replace the company's plan in the 18th POD to sidetrack the RU-4a.

The company said it anticipates that the ESP in RU-2 will fail this year and plans to replace it in conjunction with the RU-6 sidetrack.

Results of enhanced recovery waterflood efforts will be examined, Glacier said, and additional nonproducing wells

The POD for West McArthur River is the 28th for that unit which was formed in 1990 over leases held by Stewart Petroleum ...

may be converted to water injection "if appropriate."

On the exploration side, Glacier said it is working on plans for wells to evaluate oil and gas potential north of the Redoubt Northern Fault Block and would resume plans to drill when economic conditions justify that work.

In the next year Glacier said it plans to drill and stimulate a sidetrack to RU-6 and use that sidetrack "as a waterflood injection well to further enhance production," and is considering plans for additional produced water disposal. "Redoubt is a mature field and we are reaching the practical limit for water disposal using currently available methods," Glacier said, adding that it "is considering alternatives to allow continued production to the economic limit of the field."

No additional facilities are planned but the company said it would make minor modification to the Osprey platform "and add additional space for surface ESP support equipment."

West McArthur River

The POD for West McArthur River is the 28th for that unit which was formed in 1990 over leases held by Stewart Petroleum, which drilled the WMRU No. 1 well in 1991, with first production in 1991 and first sustained production in 1993.

There are currently three producing wells in the unit, two in the Area No. 1 participating area and one in the Sword PA.

The POD just submitted would cover May 1 this year through April 30, 2020.

Plans in the 27th POD included continued analyzing of production within the WMRU and enhancing production through perforation adds, well workovers and pump replacements.

Glacier said it continues to monitor production to maximize uptime and conducted "small optimization and well maintenance operations to prolong field life" during the 27th POD, completing all operations discussed in that POD.

For the 28th POD, Glacier said it will maintain an outstanding health safety and environment record at the unit and "continue to explore ways to enhance production, manage production decline, and increase total ultimate recovery from existing wells."

Glacier said it has filed a permit request with the AOGCC to dispose of produced water by converting shut-in wells to produced water disposal wells. Four shut-in wells are listed in the POD.

The company also said it continues to permit drilling plans for the Sabre prospect, which would be drilled from a jack-up rig, likely the Spartan 151. Glacier said it is seeking partners in Sabre.

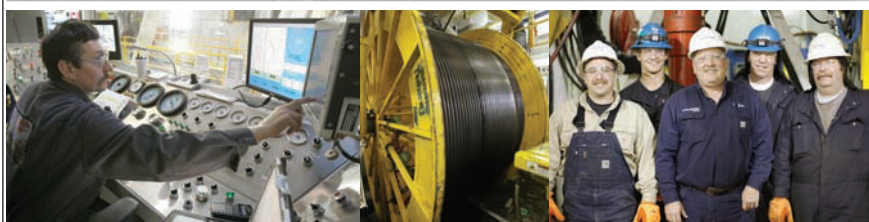
For the coming year the company said it would continue to analyze production from all wells within the unit and enhance production "as appropriate through perforation adds within wells, well workovers, and pump replacements."

No additional permanent facilities are planned. ●

Contact Kristen Nelson
at knelson@petroleumnews.com



Safer. Smarter.



Better.

Our CDR2-AC rig reflects the latest innovations in Arctic drilling to provide our customers with incident free performance and operational and technical excellence.

CDR2-AC is the first Arctic rig designed and built by Nabors specifically for Coil Tubing Drilling operations. The rig was built to optimize CTD managed pressure drilling to provide precise control of wellbore pressures for improved safety, decreased costs, and increased wellbore lengths.

Combining safety and environmental excellence with greater efficiency means CDR2-AC can deliver the high value results customers have come to expect from Alaska's premier drilling contractor.

Learn more about Nabors' new drilling technologies at Nabors.com.

 **NABORS – MISSION TO ZERO**
Safer, Smarter - Incident Free



EXPLORATION & PRODUCTION

Division of O&G lists future data releases

The Alaska Department of Natural Resources, Division of Oil and Gas, said Feb. 6 that certain exploration well and seismic data will be released within 30 days of the notice.

Most of the items are for the Nenana and Yukon Flats basins:

- A Nenana and Yukon basins geochem general exploration program in the Beaver, Fort Yukon, Circle, Fairbanks and Livengood quadrangles, described as a 2010-13 HS Fluorescence program;

- A 3-D seismic survey on Doyon land at Stevens Village, in townships 15-16 north, ranges 7-8 west, Fairbanks Meridian;

- Toghothle 1, operator Doyon Ltd., sections 2 and 35, townships 3-4 south, range 9 west, Fairbanks meridian;

- HC 1 (Healy Creek 1), operator Usibelli Coal Mine, section 16, township 12 south, range 6 west, Fairbanks Meridian.

On the North Slope:

- Icewine 1, section 9, township 4 north, range 14 east, Umiat Meridian.

Maps showing the information's location are available on the division website.

—PETROLEUM NEWS

One-year extension for Guitar unit drilling

The Alaska Department of Natural Resources has issued a notice of default to Alliance Exploration for the Guitar unit on the North Slope, and has given the company until March 31, 2020, to drill a well in the unit. The company had requested a two-year extension to the drilling commitment. Alliance's plan of exploration requires a well to be drilled by March 31, 2019.

In a Feb. 7 letter to Alliance President Samuel Nappi, DNR Commissioner Corri Feige said that, if the company does not drill the well by the March 2020 deadline, the unit may be terminated.

Feige said that Alliance's request for a two-year deferral remains pending before the director of the Division of Oil and Gas. In addition to Alliance's request for the drilling deferral, it is now too late in the winter drilling season on the North Slope for it to be practical to conduct the drilling this year. And so, with it being clear that the well will not be drilled this winter, Alliance is failing to meet its drilling commitment for the Guitar unit. Thus, the unit is now in default, Feige wrote.

The unit consists of three state leases on the southwestern side of the Prudhoe Bay unit, which had previously formed part of the Hemi Springs unit, formed in 1983 and terminated in 1992. In addition to requesting an extension to its drilling commitment, Alliance has asked for the addition of a fourth lease tract to the unit. However, the division has told Alliance that its request has not met the requirements for a unit expansion application.

—ALAN BAILEY

US drilling rig count at 1,049, up by 4

The number of rigs drilling for oil and natural gas in the U.S. was up by four the week ending Feb. 8 to 1,049.

At this time last year there were 975 active rigs.

Houston oilfield services company Baker Hughes reported that 854 rigs targeted oil (up seven from the previous week) and 195 targeted natural gas (down three).

The company said 58 of the U.S. holes were directional, 923 were horizontal and 68 were vertical.

Among major oil and gas producing states, Alaska and California were each up by four rigs; Wyoming was up one rig.

Colorado, Louisiana, North Dakota and Pennsylvania were unchanged.

New Mexico was down one rig.

Oklahoma was down two rigs and Texas, the state with the most rig activity, was down three rigs to 511.

Baker Hughes shows Alaska with 11 active rigs, up from five a year ago.

The U.S. rig count peaked at 4,530 in 1981. It bottomed out in May 2016 at 404.

—PETROLEUM NEWS

GOVERNMENT

Boutin named AIDEA executive director

The board of the Alaska Industrial Development and Export Authority has announced the appointment of Tomas Boutin as the authority's new executive director. Boutin is replacing John Springsteen, who is moving to a new role as AIDEA chief operating officer.

"We are pleased to appoint Tom as AIDEA's new executive director, and look forward to working with him and AIDEA's talented executive team as we continue our partnership with Alaskans to promote, develop, and advance economic growth and diversification in our great state," said AIDEA Board Chairman Dana Pruhs on Feb. 8, when announcing the appointment.

The management change at AIDEA reflects Springsteen's appointment to Gov. Mike Dunleavy's new Industrial Development Task Force — AIDEA says that Springsteen will bring the authority's financing expertise to the task force. Springsteen will represent AIDEA on the task force while working out of the Department of Commerce, Community and Economic Development offices in Anchorage.

"We are grateful for John's hard work and dedication during his time as executive director," Pruhs said. "His leadership was instrumental in helping guide AIDEA through several very dynamic years. We look forward to working with him in his new role on Gov. Dunleavy's task force."

Boutin is a former deputy commissioner in the Alaska Department of Revenue. As part of a career in forestry, he was Alaska state forester for four years. He obtained an undergraduate degree in forestry from the University of New Hampshire and holds a Master of Business Administration from the University of Oregon School of Business.

Springsteen obtained his undergraduate degree from the Massachusetts Institute of Technology and holds a Master of Business Administration from the Kellogg Graduate School of Management, Northwestern University.

—ALAN BAILEY

continued from page 4

EIA FORECAST

tion companies issued the lowest amount of new funding last year since at least 2013. Several factors likely contributed, including relatively higher interest rates. The agency said companies may have needed less outside capital: "Through third-quarter 2018, a group of 46 U.S. oil producers generated \$56 billion in cash flow from operating activities," EIA said, with cash flow from

operations in the first three quarters of 2018 "higher than full-year amounts from 2015-17," and 2018 cash flow likely the highest since 2014, with \$60 billion in capital expenditures and a net \$8 billion in asset sales. "Because cash from operations plus asset sales exceeded capital expenditures, many companies may have had enough cash to fund their investing activities without the need to issue debt or equity." ●

Contact Kristen Nelson
at knelson@petroleumnews.com

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

On time and on budget.

At Lynden, we understand that plans change but deadlines don't. That's why we proudly offer our exclusive Dynamic Routing system. Designed to work around your unique requirements, Dynamic Routing allows you to choose the mode of transportation — air, sea or land — to control the speed of your deliveries so they arrive just as they are needed. With Lynden you only pay for the speed you need!

LYNDEN
Innovative Transportation Solutions

lynden.com | 1-888-596-3361



**American Marine
Services Group**

6000 A Street, Anchorage, AK 99518

907-562-5420

Deadhorse, AK

907-659-9010

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



- Commercial Diving
- Marine Construction Services
- Platform Installation, Maintenance and Repair
- Pipeline Installation, Maintenance and Repair
- Underwater Certified Welding
- NDT Services
- Salvage Operations
- Vessel Support and Operations



- Environmental Services
- Oil-Spill Response, Containment and Clean-Up
- Hazardous Wastes and Contaminated Site Clean-Up and Remediation
- Petroleum Vessel Services, e.g. Fuel Transfer
- Bulk Fuel Oil Facility and Storage Tank Maintenance, Management, and Operations

Anchorage

Honolulu

Los Angeles

LAND & LEASING

Date set for spring oil & gas lease sales

May 22 is the date set for opening of sealed bids in the state's spring oil and gas lease sales, the Alaska Department of Natural Resources, Division of Oil and Gas said in sale information posted Feb. 11 on the division's website.

Areawide sales are held in the spring for both Cook Inlet and the Alaska Peninsula.

The bid opening will be at 9 a.m. in the Atwood Conference Center in Anchorage.

In Cook Inlet, there are currently 209 state oil and gas leases on some 461,000 acres, the state said, 319,000 acres onshore and 141,000 acres offshore. Gross acreage for the Cook Inlet areawide sale is 2.2 million acres onshore, and 1.7 million acres offshore, a total of 3.9 million acres.

In the Alaska Peninsula, 4 million gross acres are available, 1.75 million of which are offshore in the sale area which extends from Nushagak Peninsula south to the vicinity of Cold Bay along the northwestern side of the Alaska Peninsula.

There are no leases in this area, so all acreage is available for leasing.

—PETROLEUM NEWS

In Cook Inlet, there are currently 209 state oil and gas leases on some 461,000 acres, the state said, 319,000 acres onshore and 141,000 acres offshore. Gross acreage for the Cook Inlet areawide sale is 2.2 million acres onshore, and 1.7 million acres offshore, a total of 3.9 million acres.

continued from page 1

WELL INTEGRITY

"BP does regret this outcome and has and will take additional efforts to prevent any recurrence," Klein said.

Three-casing design

Both wells that leaked were old wells with an unusual three-casing design, with the base of the surface casing positioned inside the permafrost. In the case of the 02-03 well BP determined that the subsurface melting and subsidence of permafrost, caused by warm fluids moving up the well, had caused the surface casing to become detached from the deeper casing in the well: The surface casing had subsequently risen and struck the well housing, thus resulting in the leaks. BP told the commission that the wellhead failure of the 02-02 well appears to have resulted from the same casing movement mechanism.

The company has now shut in, plugged and disconnected 14 wells that have the problematic casing design. For two of the wells, BP has drilled new wells from different locations, targeting those wells'

reservoir targets. The company also investigated nine other wells at potential risk because of surface conductor bases in or close to the bottom of the permafrost: The company shut in four of these wells on the basis that it was not possible to be certain of the wells' safety. BP told the commission that the remaining five wells had designs that did not pose a risk of a separation of the conductor as a consequence of permafrost subsidence.

Doug Cismoski, BP wells manager for intervention and integrity, told the hearing that the well houses have been removed from the 18 shut-in wells. Warning signs have been placed next to the wells, and scaffolding is being erected around them.

In addition, the company commissioned metallurgical testing on the conductor piping of an injector well that had failed a mechanical integrity test. That testing found that the well's production casing had fractured as a result of overload, and not as a result of imperfections such as corrosion or metal fatigue, or from the use of drilling equipment. The failure of this well does not appear to be related to permafrost subsidence and may have resulted from inward buckling caused by ice, Cismoski said.

Surface subsidence measurements

In terms of more general issues relating to the potential subsidence of the permafrost at Prudhoe Bay, the advent of precise elevation measurements using GPS devices enabled BP to start conducting precision elevation measurements of well heads in 2011. This type of surveillance started in the western part of the field and was extended to the eastern operating area in 2014, Ryan Daniel, BP Alaska wells integrity and compliance leader, told the commission hearing. And BP conducted a major survey in 2018, Daniel said.

The company has found that, for the most part, there is minimal surface subsidence in the field's pads. However, subsidence has been found at six pads, four of them in the western part of the unit. Subsistence rates range from 0.2 feet per year to 0.03 feet per year, Daniel said. The higher rates are in the west. It is not known whether there is any connection between global warming and surface subsidence of the permafrost, he commented.

Daniel emphasized that the well failures under investigation resulted from an old well design in conjunction with subsurface subsidence. That subsidence appears to have pulled the casing apart, releasing the upper part of the casing to float upwards and strike the well housing.

Downward pressure

Surface subsidence, on the other hand, would tend to put downward pressure on the well casing. The question of whether the well casing would subsequently sustain damage would depend in particular on how uniformly the movement of the casing would be distributed in the subsurface. Localized strain in the casing could result in buckling — BP can detect buckling of this type in conjunction with well testing, Daniel said.

BP, in its written testimony, said that since 2011 the company has been engaged in engineering work to better understand the impact of permafrost subsidence on well integrity. To date no operated wells have failed pressure integrity tests as a consequence of subsidence.

BP said that in conjunction with its surveillance program it has been categorizing pads, based on their relative risk resulting from wellhead elevation displacement. The company determines the frequency and type of surveying for individual pads, based on each pad's risk level.

see WELL INTEGRITY page 11



Nature is Alaska's business

We thank these companies for sharing our vision of a healthy environment and a vibrant economy for many generations to come.

Corporate
Council on the
Environment

Corporate Catalysts | \$50,000+

ConocoPhillips Alaska, Inc.
Spawn Ideas

Corporate Leaders | \$25,000+

Alaska Airlines and Horizon Air
BP
Petroleum News

Corporate Partners | \$10,000+



The Chariot Group

Corporate Members | \$1,000+

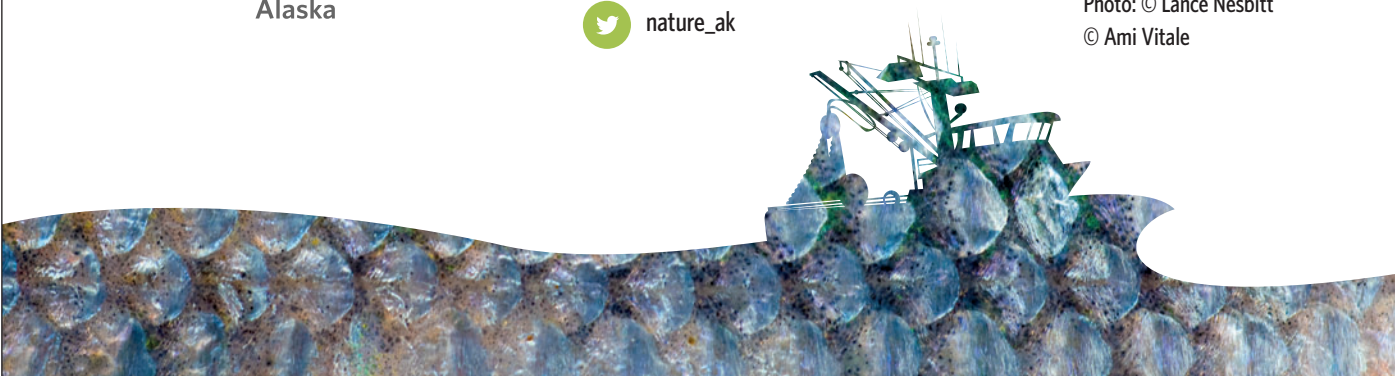
49th State Brewing Co.
ABR Inc.
Alaska Wildland Adventures Inc.
Allen Marine
Bristol Bay Native Corp.
Chugach Alaska Corp.
Denali National Park Wilderness Centers Ltd.
Icy Strait Point
Pacific Star Energy
Price Gregory International Inc.

The Nature
Conservancy
Alaska

To join us visit nature.org/alaska

 [natureconservancyalaska](https://www.facebook.com/natureconservancyalaska)
 [nature_ak](https://twitter.com/nature_ak)

715 L Street, Suite 100
Anchorage, Alaska 99501
907-865-5700
Photo: © Lance Nesbitt
© Ami Vitale



continued from page 1

PRODUCERS CRITICAL

ny's opposition to the output restrictions, bluntly warning that the policy might force a re-evaluation of plans to proceed with a C\$2.6 billion Aspen oil sands project.

Compounding that for Imperial is the flip-side of the disappearing price discount that means the cost of shipping crude by rail to U.S. Gulf Coast refineries has nearly doubled.

Kruger said the use of rail is "uneconomic ... because the drastic, dramatic manipulation and the impact on differentials (means) takeaway capacity is being idled."

"That is a sad state, a very tangible example of what we believe is ill-advised, ill-informed, negative consequences of this curtailing order," he said in delivering a rare public attack on the government.

Imperial's crude-by-rail shipments averaged 168,000 bpd (about half of all industry volumes) in December and were targeted at 175,000 bpd in the first quarter. Instead of that the rail shipments were cut in half in January and Kruger estimated it could drop to almost zero in February.

He said that shift should be proof that "intervening in free markets is not as easy and as definite as we thought," adding to his concern that there could be

Industry association spokesmen found some comfort in this softening approach, but the chief executive officers of Imperial Oil and Suncor Energy were less swayed.

backlash from the Trump administration.

Overall CBR down

Genscape, a research firm, estimated CBR loadings in Western Canada were 365,000 bpd for the week end Jan. 11, but fell to 156,000 bpd in the first week of February, raising the prospect of more crude ending up in storage, thus "slowing down the impact of any government-mandated production cuts."

Although taking a slightly softer approach, Suncor's Steve Williams agreed with Kruger that CBR economics have been "seriously damaged" by the production cutback.

"I am disappointed by the fact that the Alberta government has got us into this situation, but we are working with the government to make sure the unintended consequences are minimized," he told analysts.

"Our advice to government has been that ... it's time to start planning for what we call a soft landing or a soft exit," Williams said.

Jobs could be lost

Canadian Natural Resources, Canada's largest combined producer of oil and natural gas, has warned that jobs could be lost in Alberta's east-central heavy oil region, estimating it could be forced to shut-in more than 100,000 bpd this month, or 35 percent of its total volumes, even though its output accounts for 24 percent of all oil volumes.

It said that curtailment is "unreasonable and discriminatory ... (and) will unnecessarily impact jobs significantly" in its heavy oil plays.

A spokesman for Alberta Energy Minister Marg McCuaig-Boyd said it was "disappointing to see (CNR) threatening suppliers with jobs losses when they are being treated the same as other producers."

Gary Mar, chief executive officer of the Petroleum Services Association of Canada, said that if the overall curtailment has achieved the government's objective it should take a "reasonable" approach and roll back production cuts.

Ben Brunnen, a vice president of the Canadian Association of Petroleum Producers, said supply information provides "some confidence that the curtailment program is ... drawing down excess supply which is a critical component of driving the value of our resources." ●

Contact Gary Park through publisher@petroleumnews.com

Petroleum news

Oil Patch Bits



Lounsbury announces addition of three new employees

Lounsbury and Associates said Jan. 25 that it is pleased to announce addition of three new employees, Bruce Beck as vice president of business development, David Gamez, P.E., joins the engineering group, and Andrew Hamilton joins the surveying group.

Beck has nearly 30 years of experience in business operations, including growth and development of small business and 8(a) companies on a national-basis. He holds a B.S. degree in Biological Sciences and M.S. degree in Environmental Science and Engineering — both from University of Alaska Anchorage. Beck will identify and develop strategic customer relationships and partners that help Lounsbury implement its strategic plan to grow services in Alaska and elsewhere.

Gamez is an Alaska-licensed professional engineer with seven-plus years of experience in planning, design and construction of transportation, ports and harbors, and site develop-



BRUCE BECK

ment projects across Alaska and the Pacific Northwest. He earned his B.S. in Civil Engineering from California State University. Gamez is an emerging leader and advocate of Alaska's engineering community through active involvement in professional societies. He currently serves as vice president of the American Society of Civil Engineers-Alaska section and chair of the Committee on Autonomous Vehicles for the Institute of Transportation Engineers-Alaska section.

Hamilton is an experienced survey party chief with three-plus years of experience and background in boundary, design, as-built and construction surveying in Alaska. He is enrolled in the Geomatics program at the University of Alaska Anchorage and scheduled to graduate in spring 2020. Hamilton obtained his Remote Pilot Certificate, Part 107, from FAA in 2017.

His qualifications, education and experience make him a solid addition to Lounsbury's survey department.



DAVID GAMEZ

Companies involved in Alaska's oil and gas industry

ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS
A					
Afognak Leasing LLC		Colville Inc.		Maritime Helicopters	
Airgas, an Air Liquide company		Computing Alternatives		Motion & Flow Control Products	
AK Loft	3	CONAM Construction		N-P	
Alaska Energy Services, LLC		Cruz Construction	3	Nabors Alaska Drilling	6
Alaska Dreams		Denali Universal Services (DUS)		Nalco Champion	
Alaska Frac Consulting LLC		Doyon Anvil		NANA WorleyParsons	
Alaska Frontier Constructors (AFC)		Doyon Associated		Nature Conservancy, The	8
Alaska Marine Lines	7	Doyon Drilling		NEI Fluid Technology	
Alaska Materials		Doyon, Limited		Nordic Calista	
Alaska Railroad		exp Energy Services		North Slope Telecom	
Alaska Rubber & Rigging Supply Inc.	4	F. R. Bell & Associates, Inc.		Northern Air Cargo	10
Alaska Steel Co.		Fairweather		NRC Alaska	
Alaska Tent & Tarp		Flowline Alaska		Oil Search	
Alaska Textiles	11	Fluor		Opti Staffing	
Alaska West Express	7	Foss Maritime		PENCO	7
Alpha Seismic Compressors		Fugro		Petro Star Lubricants	
American Marine	7	G-M			
Arctic Controls		G COMM		Petroleum Equipment & Services, Inc.	
ARCTOS Alaska, Division of NORTECH		Geotemps		PRA (Petrotechnical Resources of Alaska)	
Armstrong		GMW Fire Protection		Price Gregory International	
ASRC Energy Services		Greer Tank & Welding		Q-Z	
AT&T		Guess & Rudd, PC		Raven Alaska – Jon Adler	
Avalon Development		ICE Services, Inc.		Resource Development Council	
Aviator Hotel		Inspirations		SAExploration	
B-F					
Bombay Deluxe	11	Judy Patrick Photography		Security Aviation	
BP		Little Red Services, Inc. (LRS)		Sourdough Express	2
BrandSafway Services		Lounsbury & Associates		Summit ESP, A Halliburton Service	
Brooks Range Supply		Lynden Air Cargo	7	Tanks-A-Lot	
Calista Corp.		Lynden Air Freight	7	The Local Pages	
Carlile		Lynden Inc.	7	TOTE – Totem Ocean Trailer Express	
Chosen Construction		Lynden International	7	Volant Products	
		Lynden Logistics	7	Weston Solutions	
		Lynden Transport	7		
		Mapmakers of Alaska			

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

FINANCE & ECONOMY

Petroleum property tax revenue in play

Alaska Gov. Mike Dunleavy introduced his budget Feb. 13, and while no new taxes were proposed, he did propose, in Senate Bill 57, removing the ability of cities and boroughs to get property tax revenue from petroleum property.

Its title says the bill would repeal “the levy of tax by a municipality on oil and gas exploration, production, and pipeline transportation property.”

The bill was referred to the Senate Committee on Community and Regional Affairs and the Senate Finance Committee; no hearing had been scheduled when Petroleum News went to press, but Rep. John Lincoln, D-Kotzebue, and Sen. Donny Olson, D-Golovin, put out a joint statement objecting to the loss of revenue for communities in their area of the state.

“While Senate Bill 57 applies equally to all petroleum property statewide, it, unfortunately, would have a disproportionate effect on the North Slope Borough, which is where the vast majority of Alaska’s known oil reserves are located,” Lincoln said.

“Senate Bill 57 would decimate the North Slope Borough’s budget and reduce its ability to provide for essential services like education and public safety,” Olson said. “The North Slope Borough provides many services to residents in villages outside of Utqiagvik such as policing and utilities like water and sewer. If the Borough is unable to provide for these services, then the state will have to step in, which will cost even more money in the long term,” he said, saying the measure “is not cost savings, it’s cost shifting.”

In one of several administrative orders issued in conjunction with the release of the budget, the governor ordered the “transfer of the Alaska Oil and Gas Conservation Commission, for administrative purposes only, from the Department of Administration to the Department of Commerce, Community and Economic Development,” for efficient administration.

Commerce is already the administrative home for the Alaska Energy Authority, the Alaska Industrial Development and Export Authority, the Alaska Gasline Development Corp., the Alaska Railroad Corp., the Alaska Seafood Marketing Institute, the Alcohol and Marijuana Control Office and the Regulatory Commission of Alaska.

The Department of Administration is home to the Alaska Public Broadcasting Commission, the Alaska Public Offices Commission and the Office of Administrative Hearings.

—KRISTEN NELSON

Its title says the bill would repeal “the levy of tax by a municipality on oil and gas exploration, production, and pipeline transportation property.”

Petroleum Geologist

Alaska Department of Natural Resources - Division of Oil and Gas

Are you looking for a dynamic, exciting, professional work environment?

The Department of Natural Resources, Division of Oil & Gas, is recruiting for a Petroleum Geologist. The position is an exempt, full-time, permanent position, salary DOE.

Please go to <http://dog.dnr.alaska.gov/Home/Newsroom> for a complete job description and application instructions.

The State of Alaska is an equal opportunity employer and supports workplace diversity. Individuals requiring accommodations call 800-587-0430 Voice or 800-770-8973 TTY/TDD (Relay Alaska).

continued from page 1

PIKKA WELLS

B well is to tie down more accurately the resource volumes in the oil field. The drilling of the well was started on Dec. 31 and attained a total depth of 4,844 feet during January. Rock cores were collected and processed from 480 feet of Nanushuk sands. The drill team also successfully conducted six logging runs in the well. As anticipated, the well encountered high porosity sands, saturated with hydrocarbons, the report says.

After plugging and abandoning the well, the team started drilling a sidetrack at a 71-degree angle from the main well bore. During January that sidetrack attained a depth of 3,370 feet. The plan is to drill into and core Nanushuk sands, and then conduct a well test, the report says.

Pikka C well

The purpose of the Pikka C well is to use this well as a “proof-of-concept” development well, to reduce the uncertainty regarding the production characteristics of the

Nanushuk reservoir. Drilling started on Jan. 23 and had reached a depth of 2,215 feet by the end of the month. Surface casing has been set. The idea is to drill into the Nanushuk reservoir, evaluate the reservoir characteristics, and then drill a lateral well in the reservoir. Production flow testing will follow the drilling.

Oil Search is partnering with Repsol, Armstrong Energy and GMT Exploration in the project, but has an option to buy out Armstrong’s and GMT’s interests this year. The U.S. Army Corps of Engineers published the final environmental impact statement for the Pikka project in November. Oil Search has indicated an expectation for first oil from the development in 2023. The company is still refining its estimates of how much recoverable oil the field may hold but anticipates a recoverable volume of at least 500 million barrels. The Pikka unit lies to the east of ConocoPhillips’ Colville River Delta unit.

—ALAN BAILEY

Contact Alan Bailey
at abailey@petroleumnews.com

continued from page 1

FAIRBANKS LNG

delivering LNG to the tank had yet to be contracted.

In September the IGU board approved an increase in the cost to \$52.6 million, as a consequence of unanticipated complications associated with refrigeration of the soil around the tank. Now the bids for construction of the support facilities have come in substantially higher than originally estimated. As a consequence, on Feb. 12 the IGU board approved a further increase in the budget for the tank, to \$56.7 million. Dan Britton, IGU general manager, told the board that there are sufficient funds to cover the increased costs but that, as a result of the higher cost, further financial assurance would be needed for planned work on LNG storage facilities at North Pole.

Bids higher than estimates

David Prusak, project manager for the LNG storage tank construction, told the board that originally \$4.8 million had been allocated for the construction of the support facilities. However, the engineer’s estimate, prior to inviting bids for the work, had been \$6.7 million. In the event


IGU received four bids, with costs ranging from \$9.8 million to \$14.3 million. Under the terms for the bidding, IGU is obliged to accept the lowest bid, which came from engineering firm Price Gregory. Hence the revised cost of \$56.7 million for the complete construction of the storage facility.

Prusak listed a number of items that appeared to have contributed to the cost increase, including a decision by IGU to increase the number of pumps and vaporizers in the facility from two to three, to ensure continuity of gas supplies in Fairbanks should one of these pieces of equipment fail. Other issues include an increase in the cost of materials such as steel, in part because of import tariffs. The design now incorporates an arrangement whereby LNG trucks can feed LNG directly into vaporizers, should access to the tank be lost. Heightened cybersecurity has emerged as an issue. And the proposed design involves an expensive construction arrangement for the fence surrounding the facility, to prevent the fence moving due to permafrost instability — apparently federal law requires a facility of this type to be enclosed by an adequate security fence.

—ALAN BAILEY

Real Alaskans. Real cargo.

Orange juice. Fresh produce. Refrigerators.
Whatever you need, we deliver.

CONNECT WITH US / 800.727.2141 / www.nac.aero / 

NAC

WHAT'S THE BIG ATTRACTION?



- A. an industry institution
- B. quality, accurate reporting
- C. attractive, readable design

To advertise in Petroleum News call Susan Crane at 907-770-5592

Subscribe at: www.petroleumnews.com

continued from page 1

FRENCH OUSTER

commissioner can be removed.

The first two days of the hearing, although it was public, flew under the radar of any public notice. As the defendant, French had the right to ask the state to issue a public notice, but he did not.

Coverage of the third day of the hearing by Alaska Public Media's Energy Desk relates that French ascribed his problems to differences with the other two commissioners, Cathy Forester and Dan Seamount, on the extent of the commission's authority.

French said the disagreement over the breadth of the commission's authority began in 2017 when there was a natural gas leak in Cook Inlet from a line owned by Hilcorp Alaska. French thought the commission should assert authority; the other two commissioners disagreed.

The commission's focus is on preventing waste.

Its mission statement, from the commission website, reads: "To protect the public interest in exploration and development of Alaska's valuable oil, gas, and geothermal resources through the application of conservation practices designed to ensure greater ultimate recovery and the protection of health, safety, fresh ground waters and the rights of all owners to recover their share of the resource."

The website describes the commission's activities as: "The Commission oversees oil and gas drilling, development and production, reservoir depletion and metering operations on all lands subject to the state's police powers."

State statute says, "the commission may regulate ... for conservation purposes and, to the extent not in conflict with regulation by the Department of Labor and Workforce Development or the Department of Environmental Conservation, for public health and safety purposes," and then lists: drilling, producing and plugging of wells; perforating, fracture stimulation and chemical treatment of wells; spacing of wells; disposal of salt water, nonpotable water and oil field wastes; contamination or waste of underground water; quantity and rate of production of oil and gas from a well or property; and underground injection of gas for purposes of storage.

The venting issue

Disagreement between the commissioners about the role of the commission became public after it was petitioned last year by Kate Troll to hold a hearing to bar all non-emergency venting and flaring. The petition said the commission's existing policies call for minimizing waste but said ending North Slope and Cook Inlet venting and flaring of methane would be "a

meaningful step in reducing harmful greenhouse gas emissions." (See stories in Jan. 6 and Jan. 27 issues of Petroleum News.)

The commission regulates flaring and requires reporting of all flaring events in excess of one hour with penalties if it is determined that waste has occurred.

At a Dec. 18 hearing Foerster said she was hearing a lot of questions and said perhaps a hearing wasn't the appropriate format, since commissioners do not answer questions in hearings; she suggested that some of the concerns aired could be addressed by a meeting with the commission's technical staff.

At the end of the hearing French said the commission would take the matter under advisement and if two of the three commissioners agree "we can go forward."

A Jan. 18 order on the hearing, signed by Foerster and Seamount, said witnesses at the hearing "were open about their root concern, the reason the hearing was requested, which is climate change. They acknowledged, and the AOGCC reiterated at the hearing, that while the AOGCC regulates to prevent waste, it has no authority to act regarding that subject matter." The order said no specific example or claim of waste was raised at the hearing and said testimony and questions at the hearing "appeared to stem from a general lack of familiarity with how the AOGCC addresses issues related to venting and flaring," and said the commission's technical staff were available to meet and answer questions.

French issued a separate document — he had not signed the order — with answers to questions raised at the hearing and said, "it is perfectly appropriate for citizens to ask questions of their public servants, and it is not unreasonable for them to expect answers."

Cause

Under state statute, "The governor may remove a commissioner from office for cause including but not limited to incompetence, neglect of duty or misconduct in office."

The governor's letter lists five "potential grounds" for removing French from office: "Chronic, unexcused absenteeism"; "Browbeating fellow commissioners"; "Publicly undermining the work of the AOGCC"; "Security breaches"; and "Failure to perform routine AOGCC work."

A decision from the hearing is expected by Feb. 18, at which point the Department of Law told Petroleum News that the decision and information from the hearing would be available.

—KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

continued from page 1

INSIDER

been an amazing experience," she said.

"There are not a lot of people who give their heart and soul to their jobs," but her employees at the division do, she said.

"They are dedicated and devoted professionals who take their work at the division very seriously," Walsh said.

—KAY CASHMAN

Oil Search leases 2 floors from BP in Anchorage

WHILE RAMPING UP ITS ALASKA WORKFORCE from three in March 2018 to its current 100, Oil Search has also been outgrowing its office space in the Peterson towers in downtown Anchorage.

As a result, the independent has signed a three-year lease for two floors in the BP building on the corner of Benson and the Seward Highway in mid-town.

"The move addresses not only our growing space needs, but also health and wellness, security and parking. We have

the fifth and sixth floors," Amy Burnett, Anchorage-based manager of U.S. media and communications for Oil Search, told Petroleum News Feb. 11.

The company's top Alaska executive Keiran Wulff had previously told Petroleum News that he expected the number of employees in the Anchorage office to increase to approximately 200 by the time that the front-end engineering and design, or FEED, process for Oil Search's first Nanushuk development at Pikka begins on the North Slope.

"To address immediate space needs, there are a number of employees moving during the first half of February," Burnett said. "Some renovation is being done to the space. We anticipate the remainder of the Anchorage staff will move in late March."

Following a commitment to construction, there will likely be some 800 people working on the project on the North Slope, Wulff said, with the potential for first oil from the Pikka unit flowing in 2023.

—KAY CASHMAN

continued from page 8

WELL INTEGRITY

Surveillance techniques include wellhead elevations surveys, the use of 3-D calipers for monitoring internal well tubing profiles, and pressure integrity tests. And the interior conditions of wells on pads with increased wellhead displacements are tested using tubing inserted down the wells.

Shut-in wells

BP also responded to a series of questions relating to wells that exhibit sustained casing pressures and that are shut in for long periods of time. The company commented that, in alignment with AOGCC regulations, its wells have both primary and secondary barriers, to prevent fluids flowing out of a well either in the subsurface or at the surface. The company also has a well integrity management system involving some 6,000 pressure and temperature transmitters placed in wells, with multiple transmitters placed in individual wells. These transmitters automatically provide minute by minute pressure and temperature reading from well inner and outer annuli.

The company also said that it applies additional well barrier assurance requirements to wells that have been identified as exhibiting sustained casing pressures. A computer application maintains comprehensive well information. Well integrity engineers review the status of wells, and address wells that do not meet the appropriate well barrier operability require-

ments. A well identified in this way becomes subject to some combination of actions such as further review, well work diagnostics, pressure testing and repair work. The well may be classified for a limited time as under evaluation, or it may remain offline and not operable.

While a well that may be susceptible to sustained casing pressures is monitored daily, experienced well integrity engineers use a number of parameters to assess whether the well can safely continue to operate.

The company also said that it uses a standard engineering methodology to determine the safe limits for well operating pressures, in response to any loss of internal wall thickness, or pitting resulting from corrosion or erosion. Tubing calipers or ultrasonic imaging can provide data about well wall thicknesses.

P&A of obsolete wells

When it comes to a well that has remained shut in for a long time, BP assesses whether the well may have any future utility. The Prudhoe Bay owners have voluntarily agreed with the commission to use a risk-based methodology to plug and abandon wells with no future utility. And BP has prepared a list of candidate wells for plugging and abandonment between 2019 and 2021. A number of other defunct wells are already undergoing plugging and abandonment procedures, BP's testimony said. ●

Contact Alan Bailey at abailey@petroleumnews.com

Bombay Deluxe

The Spice of Life...

Serving the finest Indian Cuisine in Alaska



Traditional chicken, lamb, seafood dishes & Indian naan bread cooked in our Tandoor (clay oven).

Vegetarian Specialties
Delicious Appetizers — Samosas, Pakoras

Ph: 907-277-1200

Conveniently located in Midtown (Valhalla Center)
555 W. Northern Lights
Anchorage, Alaska
www.BombayDeluxe.com

Lunch Buffet
Monday — Friday, 11:00 am — 2:00 pm

Dinner
Monday — Friday, 4:30 pm — 9:00 pm
Saturday & Sunday, 12:30 pm — 9:00 pm

Order on-line for pick-up or delivery at www.FoodOnTheWay.com

korbana
Protective Apparel

- Designed for Alaska's North Slope
- Unbeatable Quality
- Mens & Womens FRC
- Superior Technology
- Preferred Comfort
- Market-Proven Performance
- Designed in Anchorage Built in Kentucky
- NFPA 2112 Certified Fabrics

korbana.com Made in U.S.A.

Alaska Textiles

WHEN IT COMES TO SAFETY... THE PROVIDER MATTERS

- Alaska's Largest FRC Inventory
- 30,000+ Items Ready for Quick Ship
- Industry Leader
- Proven Performance

THAT'S WHY SO MANY COMPANIES CHOOSE ALASKA TEXTILES FOR THEIR FRC NEEDS

alaskatextiles.com (907) 265-4880

continued from page 12

ANWR FACTS

ExxonMobil, Hess, Marathon, Murphy, Oxy, Shell and Total.

First, the good news for the consortium that funded the 2-D seismic: “We are investigating whether we are permitted to make available that reprocessed data to the oil companies that own the original data and, if so, under what conditions might that data be made available,” Houseknecht told *Petroleum News* Feb. 11.

Bad news for other bidders: “We know for certain that we are not permitted to convey any of the ANWR seismic data to companies other than those 11 under any conditions,” he said.

That said, there is other key information that can be released to the public.

Other information coming

“Our seismic interpretations — both in the ANWR 1002 area and elsewhere — are focused on reducing critical geological uncertainties. We are not permitted to show or publish images of the reprocessed ANWR data, so our public presentations use analogs from offshore (ANWR 1002) and state lands west of the Canning River. In both areas, we are permitted to show images of seismic data that we have licensed from certain seismic companies,” Houseknecht said.

Field work results

USGS has conducted field work in and near the ANWR 1002 area during the past two summers, with a particular focus on oil-prone source rocks, geochemistry of oils from oil-saturated outcrops and nearby wells (including the Stinson and Kuvlum discovery wells), distribution and quality of potential reservoir rocks, and structural evolution of the area.

“Some results of that work have been presented at recent conferences and additional presentations will be made at upcoming conferences,” Houseknecht said.

The presentations will include new data as it is available that “documents the

Brookian shows promise to east

In a Nov. 2, 2017, presentation in Anchorage, David Houseknecht, a U.S. Geological Survey expert on northern Alaska, said that given the wide spacing between the vintage 2-D seismic lines shot in the ANWR 1002 area in the mid-1980s, it would be possible to hide a stratigraphic trap on the scale of Willow or Pikka between the lines. (Both are major Nanushuk oil discoveries that lie west of the central North Slope.)

Houseknecht also said the Brookian sequence shows hydrocarbon potential in the ANWR 1002 area.

In a mid-2018 *Petroleum News* interview, Paul Decker talked about younger Brookian sediments deposited on the ancient shelf margin in the 1002 area, noting they were analogous to the huge Nanushuk formation discoveries by Armstrong and partner Repsol west of the central North Slope.

Although Nanushuk rocks are not found on the eastern North Slope, Decker said the Nanushuk oil play may prove valuable as a geologic paradigm for oil prospects to the east in the 1002 area.

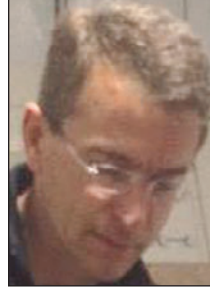
At the time, Decker was the lead petroleum geologist at Alaska’s Division of Oil and Gas; today he is working for Armstrong and Repsol’s new operating partner, Oil Search.

In addition to the western finds, Armstrong and Oil Search more recently became 50-50 partners in a 195,200-acre block on the eastern North Slope.

“We’re trying to continue to make the play that we discovered to the west, the Nanushuk at Pikka,” Armstrong Oil & Gas President and CEO Bill Armstrong told *Petroleum News* Jan. 30.

“It is a very subtle play; that’s why it has been hidden for so long. ... The amount of running room this concept has is just massive in Alaska. ConocoPhillips is chasing it west ... but going east from Pikka we also see the same thing. We’re really excited,” he said, not naming the lookalike formation.

—KAY CASHMAN



PAUL DECKER



BILL ARMSTRONG

absolute age and richness of source rocks and show that the richest source rocks occur in very specific parts of the overall source rock intervals,” he said.

“Our work also shows that most of the oils were derived from two main source rocks and that smaller proportions of some oils likely were contributed by a third source rock,” he said.

When 3-D seismic, lease sale?

Partners SAExploration, Arctic Slope Regional Corp. and Kaktovik Inupiat Corp. are behind the 3-D seismic that was expected to be shot this winter in the 1002 area.

The program, referred to as the Marsh Creek 3-D survey, would have encompassed the entire 1002 area, some 2,600 square miles.

SAE, the operator of the survey, anticipated the program would take two winter seasons to complete. Among other things, the federal shutdown stopped the survey from proceeding as planned.



JOE BALASH

USGS has already started releasing its new 1002 area information, starting with the Arctic Technology Conference last October in Houston.

According to Joe Balash, assistant secretary of the Interior for Land and Minerals Management, SAE is hoping to mobilize to the village of Kaktovik yet this winter.

“At this point I don’t expect that’s going to happen this winter but they are still exploring the option,” Balash told *Petroleum News* Feb. 12. “They’d like to salvage even a little bit of this season,” he said, which will make it easier to get back underway in December.

Balash said SAE can’t begin work until it gets a Marine Mammal Protection Act permit from the U.S. Fish and Wildlife Service; getting the authorization involves several steps, including a 30-day public comment period that has not yet begun and can be extended.

Fish and Wildlife manages ANWR as a whole and maintains a conservation plan for the refuge.

As far as plans to conduct an ANWR 1002 lease sale this year, it’s still in the works, Balash said, with fall as “fair estimate.”

When, where new USGS info

USGS has already started releasing its new 1002 area information, starting with the Arctic Technology Conference last October in Houston.

Houseknecht has been using the title “Current and future exploration frontiers in Arctic Alaska,” covering his perspective of the entire region, divided into six areas, one of which is the ANWR 1002 area and the adjacent offshore.

He is next speaking at the Arctic Oil and Gas Symposium in Calgary, using the same title and format, but adding new information as it becomes available.

“Two of us are presenting at the AAPG Annual meeting in San Antonio in May,” Houseknecht said, noting the titles: “Dave Houseknecht: Geological and petroleum systems framework of the ANWR coastal plain (Arctic National Wildlife Refuge 1002 Area) — this is a talk.”

The other, a poster, will come from Kate Whidden and others, he said. It is titled, “Stratigraphy and facies of the Hue Shale in northern Alaska: Evidence for a viable continuous resource play in an emerging basin.”

Although the poster title does not specify the ANWR 1002 area, it will include it and state lands.

How soon will all the new information be released?

“We are working to publish all our observations as quickly as possible, but that process typically takes a year or more after the work is completed,” Houseknecht said.

He had no comment on whether or not Interior was providing USGS with additional funds to get the information out before the upcoming 1002 lease sale.

Editor’s note: Only one well has ever been drilled in the ANWR 1002 area. This was the onshore KIC well, drilled in 1985 and 1986 by operator Chevron (50 percent) and partner BP (50 percent) from surface land owned by Kaktovik Inupiat Corp., the Native village corporation for Kaktovik, and into the subsurface oil and gas mineral rights owned by Arctic Slope Regional Corp., the Native regional corporation for northern Alaska. Chevron and BP still hold under lease the 92,000 acres that surround the KIC exploration well. The findings from that well remain confidential. ●

Contact Kay Cashman
at publisher@petroleumnews.com



Keeping you covered.

To advertise in *Petroleum News*, please contact Susan Crane at 907-770-5592



Petroleum
news

www.petroleumnews.com