

page State challenges tariff increase; **2** RCA sets temporary PTE rate

Vol. 23, No. 36 • www.PetroleumNews.com

A weekly oil & gas newspaper based in Anchorage, Alaska

Week of September 9, 2018 • \$2.50

Alyeska to shrink workforce by 10 percent as company restructures

Alyeska Pipeline Service Co., the operator of the trans-Alaska pipeline, expects to shrink its workforce by 10 percent in conjunction with a major restructuring of the company, Tom Barrett, the company president, has announced in a letter to Gov. Bill Walker, Alaska legislators and state commissioners. The job losses will impact both company employees and contractors.



Barrett said that following an initiative launched in 2017, to investigate ways whereby Alyeska could remain technically and economically viable through the

see ALYESKA RESTRUCTURING page 12

FERC sets schedule for final Alaska LNG order under NGA

The Federal Energy Regulatory Commission said Aug. 31 that it anticipates the issuance of a final order for the Alaska LNG Project on Feb. 6, 2020. This is about a month earlier than the March 8, 2020, date FERC published last March.

The Alaska Gasline Development Corp. filed an application for a permit under section 3 of the Natural Gas Act and Part 153 of FERC regulations on April 17, 2017. The application covers siting, construction and operation of a new LNG export terminal and associated facilities near Nikiski, and construction of some 871 miles of natural gas pipeline and associated facilities.

The project would liquefy and export up to 20 million metric

see FINAL ORDER page 9

Supreme Court reverses ruling on Alaskan Crude Moose Point lease

The Alaska Supreme Court has upheld an order by the Alaska Department of Natural Resources terminating a lease held on the northwest coast of the Kenai Peninsula by Alaskan Crude Corp., owned by Jim White, a veteran wildcat driller. The court decision overturns an earlier Alaska Superior Court ruling that had determined that the lease termination had been invalid.

The lease in question, about 25 miles northeast of the city of Kenai, is the site of the Moose Point Unit No. 1 well, drilled in early 1978 by Amarex Inc. The well reached a total depth of 10,058 feet, was suspended in March 1978, and plugged and abandoned a year later.

see **RULING REVERSED** page 6

State responds to production tax lawsuit by Exxon, Hilcorp, SAE

The state of Alaska has responded to a complaint filed in June by Exxon Mobil Corp., Hilcorp Alaska LLC and SAExploration Inc., against the Alaska Department of Revenue's 2017 advisory bulletin which the complaint said "re-interprets Alaska's tax code and regulations to increase the tax burden on taxpayers by approximately \$110 million in 2018 and to retroactively impose back taxes of \$50 million (plus an unspecified amount of interest) for tax years 2014-

The complaint said the 2017 advisory bulletin reversed the position the Department of Revenue had taken in a 2011 advisory bulletin, a reversal made without public comment or due process.

see LAWSUIT RESPONSE page 8

EXPLORATION & PRODUCTION

Final SEIS is issued

BLM supports Conoco plan for Greater Mooses Tooth 2 development in NPR-A

By ALAN BAILEY

Petroleum News

he federal Bureau of Land Management has published a final supplementary environmental impact statement for ConocoPhillips' Greater Mooses Tooth 2 development in the northeastern National Petroleum Reserve-Alaska. Essentially, the SEIS has as its preferred option ConocoPhillips' plan to build a 14-acre drill pad that could host up to 48 wells, to operate, in effect, as a satellite of the Alpine oil field in the Colville River Delta to the east — produced fluids would be transported by pipeline via the Greater Mooses Tooth 1 pad to the Alpine central processing facility.

ConocoPhillips has previously said that it anticipates production rates in the range of 25,000 to

ConocoPhillips has proposed two alternative development schedules for the project, one starting in the fourth quarter of 2018 and the other starting in the fourth quarter of 2019.

30,000 barrels per day from the project, and that the project will cost around \$1.5 billion.

The SEIS supplements the EIS published in 2004 for ConocoPhillips' plan for the development of Alpine satellite fields. The SEIS also tiers onto an EIS for BLM's NPR-A Integrated Activity Plan, published in 2013. The Integrated Activity Plan specifies which areas within the NPR-A are open

see FINAL SEIS page 11

EXPLORATION & PRODUCTION

Second NEWS phase

Conoco schedules startup of Eastern NEWS for 2023; 10,000 bpd from NEWS

By TIM BRADNER

For Petroleum News

laska producers are cracking the code in tap-A ping a huge resource of thick "viscous" oil on the North Slope. The latest project, called North East West Sak, or NEWS, is now producing above projections and was brought in at almost half of estimated costs, said officials with ConocoPhillips, which is operating NEWS.

The company's success has led it to plan an expansion into the second phase of development called Eastern NEWS, now scheduled for a startup in 2023

For decades companies have worked on ways of economically exploiting the West Sak, a large Driscoll said he believes the same kind of incremental technical leaps that have made West Sak viscous oil economically viable can be applied at Ugnu, the huge

heavy oil resource that has also be identified on the slope. Ugnu oil is even thicker or more difficult to produce than the viscous oil.

deposit that overlays conventional oil reservoirs on the Slope.

Efforts were frustrated, however, by the cool, thick nature of the oil — it flows like cooking oil,

see **NEWS STARTUP** page 10

PIPELINES & DOWNSTREAM

Line takes legal blow

Canada's appeal court halts work on Trans Mountain, possibility of 2-stage rescue

By GARY PARK

For Petroleum News

anada's Federal Court of Appeal second only to the nation's Supreme Court — wiped out thousands of jobs and billions of dollars in government revenues while doing untold damage to Canada's ability to attract investment in resource projects in a single blow RACHEL NOTLEY on Aug. 30.

A three-judge panel forced the National Energy Board to halt construction work on the C\$9.4 billion expansion of Trans Mountain's pipeline from Alberta to the Pacific Coast, generating an outpouring of celebration among First Nations, environmentalists, some municipal governments and



the British Columbia administration of left-leaning Premier John Horgan.

The net result is that Canada's last serious hope of obtaining world prices for its oil sands production has been thwarted, potentially adding Trans Mountain to a list of smoking carcasses, notably Enbridge's Northern Gateway proposal and Trans Canada's plan for Energy East.

If all three become historical footnotes, Canada will have lost a chance to export 2.2 million barrels per day of raw bitumen to Asia, Europe and even the Middle East, where producers could have collected up to C\$30 per barrel more

see TRANS MOUNTAIN page 8

PIPELINES & DOWNSTREAM

State challenges PTE tariff rate increase

Cost to move condensate from Point Thomson to Badami would increase to \$20.84 per barrel; current rate, set by settlement, \$12.09

By KRISTEN NELSON

Petroleum News

The Regulatory Commission of Alaska has suspended PTE Pipeline LLC's tariff revision and established a temporary rate equal to the filed rate, subject to refund with interest, the commission said in an Aug. 29 order.

On July 30, PTEP LLC filed a revenue requirement study based on a 2017 case year and proposed a new rate of \$20.84 per barrel. The state protested the increased tariff and petitioned to intervene in the proceeding, a petition which RCA accepted.

The tariff is for the 22-mile line between the Point Thomson unit on Alaska's North Slope and the Badami Pipeline. The line, owned 68 percent by ExxonMobil Pipeline Co. and 32 percent by BP Transportation (Alaska) Inc., went into operation in 2016, moving condensate from the Point Thomson field.

In 2015 PTE proposed a rate of \$20.39 per barrel; both the state and ConocoPhillips protested. RCA accepted a

PTE also argues that the 4,500-bpd estimate of throughput is lower than the rate for calendar year 2017 but reflects the lower throughput in the first six months of 2018.

settlement rate of \$12.09 per barrel effective April 1, 2017, based on expected volumes, replacing a rate of \$17.56 per barrel which replaced the proposed rate. The \$12.09 rate was to end when PTE Pipeline placed new rates into effect, no later than July 1, 2019.

State's objection

In its Aug. 20 protest, the Alaska Attorney General's office said the proposed tariff "is unjust and unreasonable because the proposed tariff rate is based on unsupported and unexplained assumptions and assertions."

The proposed new tariff, \$20.84, is a 41.9 percent increase from the settlement rate, the state said.

On specifics of the rate, the state argued the weighted

average cost of capital of 9.68 percent includes a return on equity of 14.23 percent, "too high relative to other pipeline carriers in Alaska." It includes a 1 percent risk premium.

That risk premium is based on upstream operational problems, the state said, adding that "short-term operational issues should not justify a long-term risk premium."

The state said PTE "inadequately supports operating and maintenance costs," with are based on master services and operating services agreements provided at cost, but without "data or documents to substantiate the claim that these services are in fact 'at cost.""

The state said throughput estimates are unreasonably low since the pipeline's upstream partner "intends to ship 10,000 barrels of gas condensate per day."

The state said it is engaged in discussions with the pipeline "in an attempt to narrow the issues that will be the subject of this proceeding or potentially to resolve the

see PTE TARIFF page 4

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ANS July production down 13% from June

July average 416,357 bpd, down 55,826 bpd from June; Alpine down 24,013 bpd due to planned maintenance; inlet average 14,904 bpd

By KRISTEN NELSON

Petroleum News

laska North Slope production, crude oil and natural gas liquids, averaged 416,357 barrels per day in July, down 12.8 percent, 55,826 bpd, from a June average of 477,364 bpd, and down 4.7 percent from an average of 437,067 bpd in July of 2017.

The current month-over-month drop was triggered by summer maintenance shutdowns, with Alpine down completely for more than half of the month and overall Slope production slowed by a 12-hour shutdown of the trans-Alaska oil pipeline July 6.

Unless otherwise noted, production data is from the Alaska Oil and Gas Conservation Commission, which provides volumes by well on a month-delay basis.

Alpine, the ConocoPhillips Alaskaoperated Colville River unit, had the largest month-over-month per-barrel drop, averaging 24,013 bpd in July, down 61.7 percent, 38,625 bpd, from a June average of 62,638 bpd. The field was down 59 percent from a July 2017 average of 58,556 bpd.

This year's decline was due to planned maintenance. ConocoPhillips told Petroleum News in June that "a major maintenance shutdown" was planned for Alpine in mid-July. The field went offline July 13 according to data from the Department of Revenue's Tax Division; the restart began Aug. 13. In addition to oil from the main Alpine pool, Colville production includes satellite production from Fiord, Nanuq and Qannik.

The ExxonMobil Production-operated Point Thomson field had the largest month-over-month percentage drop, 94.2 percent, averaging 72 bpd in July, down 1,170 bpd from a June average of 1,242, and down 96 percent from a July 2017 average of 1,739 bpd. Facilities at Point Thomson were built to handle 10,000 bpd of condensate, but compressor problems have plagued the field, which came online in April 2016.

Prudhoe, Kuparuk

The BP Exploration (Alaska)-operated Prudhoe Bay field, the North Slope's largest, averaged 226,020 bpd in July, 191,327 bpd of crude and 34,693 bpd of NGLs, a combined drop of 5.2 percent, 12,422 bpd, from a July average of 238,442 bpd, but an increase of 9.2 percent over a July 2017 average of 207,028 bpd. Production from the Prudhoe Bay field includes Aurora, Borealis, Lisburne, Midnight Sun, Niakuk, Polaris, Point McIntyre, Put River, Raven and Schrader Bluff.

The ConocoPhillips-operated Kuparuk River field averaged 102,274 bpd in July, down 5.6 percent, 6,051 bpd, from an average of 108,325 bpd in June, and down 0.4 percent from a July 2017 average of 102,682 bpd. In addition to the main pool, Kuparuk produces from satellites at Meltwater, Tabasco and Tarn, and from West Sak.

Other Slope fields

The Hilcorp Alaska-operated Milne Point field averaged 17,346 bpd in July, down 14.4 percent, 2,913 bpd, from a June average of 20,259 bpd, and down 14.5 percent from a July 2017 average of 20,296 bpd

The current month-over-month drop was triggered by summer maintenance shutdowns, with Alpine down completely for more than half of the month and overall Slope production slowed by a 12hour shutdown of the trans-Alaska oil pipeline July 6.

Nikaitchuq, operated by Eni, averaged 18,454 bpd in July, down 3.7 percent, 715 bpd, from a June average of 19,170, and down 12.4 percent from a July 2017 average of 21,070 bpd.

The Caelus Alaska-operated Oooguruk field averaged 9,696 bpd in July, down 9.9 percent, 1,062 bpd, from a June average of 10,758 bd, and down 1.4 percent from a June 2017 average of 9,831 bpd.

The Hilcorp-operated Endicott field averaged 6,619 bpd of crude and 649 bpd of NGLs in July, a combined 7,268 bpd, up 0.3 percent from a June combined average of 7,248, and up 2.2 percent from a July 2017 average of 7,113 bpd.

Northstar, also operated by Hilcorp, averaged 8,167 bpd of crude and 1,184 bpd of NGLs in July, a combined 9,351 bpd, up 33.7 percent from a June combined average of 6,996 bpd and up 18.6 percent from a July 2017 average of 7,885 bpd.

Badami, operated by Glacier Oil & Gas subsidiary Savant Alaska, averaged 1,862 bpd in July, down 14.6 percent, 318 bpd, from a June average of 2,180 bpd, but up 114.7 percent from a July 2017 average of 867 bpd.

Cook Inlet

Cook Inlet averaged 14,904 bpd in July, marginally down from 14,914 bpd in June, and down 1.8 percent from a July 2017 average of 15,176 bpd.

Hilcorp-operated Beaver Creek averaged 84 bpd in July, up 26 percent from a June average of 67 bpd and down 96.3 percent from a July 2017 average of 177 bpd.

Granite Point, also operated by Hilcorp, averaged 2,846 bpd in July, down marginally from 2,848 bpd in June and up 21.5

percent from a July 2017 average of 2,343 bpd.

The BlueCrest operated Hansen field, the Cosmopolitan project, averaged 865 bpd in July, up 7.9 percent from a June average of 801 bpd and up 214.4 percent from a July 2017 average of 275 bpd.

Hilcorp's McArthur River field, Cook Inlet's largest, averaged 4,765 bpd in July, down 4.2 percent from a June average of 4,973 bpd and down 4.3 percent from a July 2017 average of 4,981 bpd.

Middle Ground Shoal, also operated by Hilcorp, averaged 1,219 bpd in July, up 26.6 percent from a June average of 963 bpd; the field had no production in July 2017

Redoubt Shoal, a Glacier Oil & Gas field, averaged 1,287 bpd in July, up 2.2 percent from a June average of 1,260 bpd and down 35 percent from a July 2017 average of 1,980 bpd.

Hilcorp's Swanson River field averaged 1,290 bpd in July, down 11.1 percent from a June average of 1,450 bpd, and down 34 percent from a July 2017 average of 1,953 bpd.

Trading Bay, also operated by Hilcorp, averaged 1,554 bpd in July, down 0.7 percent from a June average of 1,565 bpd and down 25.6 percent from a July 2017 average of 2,089 bpd.

Glacier's West McArthur River field averaged 994 bpd in July, up 0.7 percent from a June average of 987 bpd and down 27.9 percent from a July 2017 average of 1,378 bpd.

ANS crude oil production peaked in 1988 at 2.1 million bpd; Cook Inlet crude oil production peaked in 1970 at more than 227,000 bpd. ●

Contact Kristen Nelson at knelson@petroleumnews.com

EXPLORATION & PRODUCTION

National rig count rises by 4 to 1,048

The number of rigs drilling for oil and natural gas in the U.S. increased by four the week ending Aug. 31 to 1,048.

At this time a year ago there were 943 active rigs.

Houston oilfield services company Baker Hughes reported that 862 rigs targeted oil (up two from the previous week) and 184 targeted gas (also up two). Two were listed as miscellaneous (no change).

Among major oil- and gas-producing states, Louisiana gained one. New Mexico and Oklahoma each lost one. Alaska, California, Colorado, North Dakota, Texas and Wyoming were unchanged.

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

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EXPLORATION & PRODUCTION

Latest Hammerhead discovery 4B barrels

ExxonMobil has named its latest oil discovery Hammerhead, but instead of being offshore Alaska's North Slope, this Hammerhead is offshore the tiny South American nation of Guyana.

The 4 billion-barrel discovery was announced Aug. 30 by Exxon, which noted Hammerhead was its ninth offshore

Guyana discovery.

According to a recent statement by Wood Mackenzie, a trusted source of commercial information about the world's natural resources, Exxon's exploration success in the last few years has been 82 percent and established the Guyana basin as one of the world's offshore exploration hot spots.

The 4 billion-barrel discovery was announced Aug. 30 by Exxon, which noted Hammerhead was its ninth offshore Guvana discovery.

Alaska's Hammerhead, renamed Sivulliq by Shell in 2016, straddles an area north of the boundary between state-owned North Slope land and ANWR's 1002 area. In the western part of Camden Bay, the federal prospect is northeast of Exxon's Point Thomson field and has a known oil pool between 100 million to 200 million barrels in size, per a well drilled by Unocal in the mid-1980s.

Because it was too far from infrastructure at the time — not the case today — the reservoir has not been delineated. In 2012, Shell started drilling an exploration well at Hammerhead but was only able to complete the top hole section of the well.

Arctic Slope Regional Corp.'s exploration arm, AEX, has since acquired the leases from Shell.

-KAY CASHMAN

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Kay Cashman **PUBLISHER & FOUNDER**

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Steven Merritt

Alan Bailey SENIOR STAFF WRITER

CONTRIBUTING WRITER Eric Lidji

Gary Park CONTRIBUTING WRITER (CANADA)

Judy Patrick Photography CONTRACT PHOTOGRAPHER

CONTRACT PHOTOGRAPHER **Forrest Crane**

CIRCUI ATION MANAGER Renee Garbutt

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

FAX FOR ALL DEPARTMENTS 907.522.9583

Petroleum News and its supple ment, 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. 23, No. 36 • Week of September 9, 2018 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. GOVERNMENT

Protection for BSEE Alaska whistleblower

By DAN JOLING

Associated Press

he federal office that protects employees against reprisals for whistleblowing is advocating on behalf of a federal employee in Alaska who complained about the handling of an Arctic offshore lease sale.

The U.S. Office of Special Counsel announced Aug. 28 it's filing a whistleblower retaliation complaint with the Merit Systems Protection Board on behalf of Jeffrey Missal, a regional environmental officer for the Department of the Interior's Bureau of Safety and Environmental Enforcement.

Missal was fired after filing a complaint with the Interior Department's inspector general and contending that the department violated environmental regulations to facilitate Arctic oil exploration.

Interior Department spokeswoman Heather Swift said by email she could not immediately comment because the complaint was a personnel matter.

Missal has been represented by the Government Accountability Project, a whistleblower advocacy organization. Missal was fired in January 2016, but the board halted the termination in August 2017.

"This reprieve kept Mr. Missal from losing his home," the advocacy group said in a release Aug. 28.

Missal's work has been restricted at the Bureau of Safety and Environmental Enforcement, the group said.

"Even after putting Mr. Missal back on payroll, it has continued to violate many of the details of MSPB stay orders by continuing to isolate him and intentionally restricting his normal duties," said Tom Devine, Missal's attorney from the advocacy group,

in a prepared statement.

According to the Office of Special Counsel, Missal in 2012 began expressing concern that the Interior Department had violated environmental regulations to facilitate oil exploration in the Arctic Ocean.

Records from the Merit System Protection Board indicate that Missal believed the Bureau of Safety and Environmental Enforcement violated the environmental review process for a lease sale in the Chukchi Sea off Alaska's north-

When Missal was not satisfied with the internal response to his complaints, he filed a complaint with the department's inspector general.

In 2014, on the same day a senior employee was informed of the inspector general's inquiry, the senior employee launched an investigation of Missal.

Missal was fired based on alleged misconduct discovered in the investigation. However, the Office of Special Counsel concluded the termination was retaliatory for his complaint to the inspector general.

Missal was reinstated for 45 days in August 2017. The special counsel since then has obtained eight more stays of the firing while negotiating to resolve the case.

The Interior Department has declined to provide corrective action, so the office moved forward with a complaint to the Merit Systems Protection Board, said Zachary Kurz, spokesman for the Office of Special Counsel.

"Whistleblowers must have confidence they can report wrongdoing without facing retaliation," said Special Counsel Henry J. Kerner in the announcement.

continued from page 2

PTE TARIFF

State's concerns."

PTE response

PTE Pipeline responded to the state's protest Aug. 24. In response to issues regarding lack of adequate detail, PTE said that to the extent more detail is needed, it would provide that once investigation in the docket gets underway.

Among issues to which PTE responded were the risk premium. In the response, PTE noted testimony that risks faced by the pipeline are considerably greater than the proxy group and are the same as many risks faced by the trans-Alaska oil pipeline in its early years — with additional development risks not faced by the oil line.

PTE disputed the state's contention

that the stated intention at Point Thomson was to produce 10,000 bpd; what the upstream partner has said, PTE argues, is that the Point Thomson production facilities are designed to produce up to 10,000 bpd of condensate.

PTE also argues that the 4,500-bpd estimate of throughput is lower than the rate for calendar year 2017 but reflects the lower throughput in the first six months of

RCA has appointed a panel to hear the issue, appointed an administrative law judge and suspended the proposed tariff for an initial period of six months, ending March 1, 2019, during which the proposed tariff will be collected, subject to refund of the difference between the temporary rate and the final rate determined by the commission, with interest.

> Contact Kristen Nelson at knelson@petroleumnews.com



PETROLEUM NEWS • WEEK OF SEPTEMBER 9, 2018

Congratulations Hilcorp!

The Bureau of Ocean Energy Management has issued a final Environmental Impact Statement for Hilcorp Alaska's planned Liberty oil field development offshore in the Beaufort Sea. The agency has confirmed a preferred alternative accepting Hilcorp's proposal to develop the field from a small gravel island about five miles offshore and the laying of a buried subsea pipe-in-pipe pipeline to carry crude oil to shore. The pipeline would connect with the existing Badami pipeline for transporting the Liberty oil to the trans-Alaska pipeline.

Hilcorp has previously said it hopes to start building the island in late 2019, with the laying of the subsea pipeline in the following winter and first oil from the field likely flowing in 2022.

The field is thought to hold around 120 million barrels of recoverable oil.

Dave Wilkins and team, we appreciate your ongoing efforts in Alaska oil and gas exploration, development and production.



David Wilkins, senior vice president, Hilcorp Alaska

Afognak Leasing LLC

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Alaska Frontier Constructors (AFC)

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North Slope Telecom

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PENCO

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FINANCE & ECONOMY

Kaktovik has boom in polar bear tourism

A tiny Alaska Native village has experienced a boom in tourism in recent years as polar bears spend more time on land than on diminishing Arctic sea ice.

More than 2,000 people visited the northern Alaska village of Kaktovik on the Beaufort Sea last year to see polar bears in the wild, Alaska's Energy Desk reported Sept. 3.

The far north community is located on the north shore of Barter Island on the Beaufort Sea coast in an area where rapid global warming has sped up the movement of sea ice, the primary habitat of polar bears. As ice has receded to deep water beyond the continental shelf, more bears are remaining on land to look for food.

The village had less than 50 visitors annually before 2011, said Jennifer Reed, of the Arctic National Wildlife Refuge.

"Today we're talking about hundreds and hundreds of visitors, many from around the world each year," Reed said.

More bears staying on land

Polar bears have always been a common sight on sea ice near Kaktovik, but residents started noticing a change in the mid-1990s. More bears seemed to stay on land, and researchers began taking note of more female bears making dens in the snow on land instead of on the ice.

U.S. Fish and Wildlife Service biologists began hearing reports of increasing numbers of polar bears in the area in the early 2000s, Reed said. As more attention was given to the plight of polar bears about a decade ago, more tourists started heading to Kaktovik.

Most tourists visit in the fall, when bears are forced toward land because sea ice is the farthest away from the shore. Some bears become stranded near Kaktovik until the sea freezes again in October or November.

The fall is also when residents of Kaktovik kill three bowhead whales. Bruce Inglangasak, an Inupiaq subsistence hunter who offers wildlife viewing tours, said residents were unsure how tourists would react to whaling.

"The community was scared about, you know, activists that was going to try to get us to shut down the whaling — subsistence whaling," Inglangasak said. "But that's not true."

Inglangasak said he's been offering polar bear tours since 2003 or 2004.

Most of his clients are from China and Europe, as well as from the Lower 48 U.S. states and arrive in Kaktovik on charter planes from Anchorage and Fairbanks.

Many tourists stay several days in the village, which has two small hotels, Inglangasak said.

—ASSOCIATED PRESS



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keep advancing



continued from page 1

RULING REVERSED

Acquired in 2003

In 2003 Alaskan Crude acquired the lease containing the well from lease owners, who had acquired the lease in a 2001state oil and gas lease sale. The term of the lease was seven years, so that the lease was scheduled to terminate at the end of 2008.

But, because the well lay within 1,500 feet of a property line, White had to apply to the Alaska Oil and Gas Conservation Commission for a spacing exception, to protect the rights of adjacent landowners. The AOGCC issued a conservation order in March 2005, allowing the well re-entry and testing, but prohibiting any production from the well until after a commission hearing regarding the ownership rights over the subsurface resources.

White has told Petroleum News that the Moose Point prospect has high potential for both oil and gas and that he started drilling operations at the well in the winter of 2005-06, with drilling recommencing in 2007. White funded the project entirely by himself, underwriting the project risks.

Unstable gas market

The Moose Point well is situated not far from the Kenai Peninsula gas pipeline infrastructure.

And the market for gas from the Cook Inlet basin impacted Alaskan Crude's project, with drilling halting in response to the mothballing of the fertilizer plant at Nikiski on the Kenai Peninsula in September 2007 — White had seen the fertilizer plant as a prospective buyer of gas from his lease. However, 2008 saw an agreement between the Palin administration and the owners of the Nikiski liquefied natural gas plant for state support for the plant's export license extension in 2009, if the plant owners made at least 30 million cubic feet per day of plant capacity available for purchase from non-owner Cook Inlet gas producers. In response, White returned to drilling at Moose Point. But, with a mild early winter and with frozen ground being needed for access to the well site, drilling operations could not mobilize until Dec. 20, he told Petroleum News.

Lease termination

On Dec. 31, 2008, the last day of the lease term, a DNR inspector observed drilling equipment, including a drilling rig, and evidence of well entry at the well site. But on Jan. 2, 2009, DNR notified White that the lease had been terminated.

White subsequently asserted that he had actually been drilling at the well site on the lease expiry day and that the rules for the lease require a lease extension to be granted, if drilling is in progress on the date on which the lease would otherwise expire. Following an appeal to DNR, the DNR commissioner withdrew the lease termination notice. However, as a condition for the lease extension, the commissioner required Alaskan Crude to continue drilling a well and to complete the well by April 27, 2009, with production from the well to start within 90 days of the end of drilling.

Appeal against DNR terms

White protested, arguing that the April 27 deadline represented a modification to the original lease terms. White also said that it would not be prudent to immediately risk further capital on the drilling project, given the risk of not being able to complete the drilling before the end of the winter drilling season. In July 2009 DNR terminated the

When an appeal to the DNR commissioner failed to reverse the July lease termination decision, White launched an administrative appeal in Superior Court. The Superior Court judge upheld Alaskan Crude's position, saying that the lease did not require completion of the well by any specific date and did not require it to have sustained production within 90 days. The judge said that DNR had not allowed for the difficulty of continuing the drilling, given the need for winter conditions for site access. The court also observed that the AOGCC order for the well precluded Alaskan Crude from complying with DNR's deadline for the commencement of

DNR appealed the Superior Court ruling to the state Supreme Court.

Supreme Court supports DNR

The Supreme Court agreed with the Superior Court that DNR's January 2009 lease termination had been invalid and had breached the terms of the lease. But, while agreeing that DNR's subsequent re-instatement of the lease cured that breach, the court took a view that the April drilling deadline that DNR had imposed was a justifiable expectation, if Alaskan Crude were to continue drilling the well with reasonable diligence. And the court agreed with DNR that, although the dispute over the lease termination had delayed the drilling program, Alaskan Crude would have been able to continue the drilling in 2009 within the period of winter conditions at the well site.

White told Petroleum News that, if the drilling had not been delayed as a result of the lease termination dispute, Alaskan Crude could have completed the well.

And despite the setback, White is determined to continue with his ventures, seeking wildcat drilling opportunities.

"I'm still here," White said.

—ALAN BAILEY



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PETROLEUM NEWS • WEEK OF SEPTEMBER 9, 2018

Congratulations ConocoPhillips!

Hats off to Conoco as it continues to move forward on its plans for a standalone Willow processing facility west of the central North Slope.

The project will include the construction, operation and maintenance of a central processing facility; the construction of up to five well pads, with up to 50 wells on each pad; roads, an airstrip, pipelines and construction of a temporary Beaufort island to facilitate the delivery of project modules.

As BLM starts EIS scoping for Willow, Acting State Director Karen Mouritsen says "analyzing the proposed Willow prospect in a single MDP/EIS will result in a quicker and more efficient process for the approval of applications for permits to drill."

ConocoPhillips recently upped its estimated recoverable oil from Willow to 400-750 million barrels, with peak production rates near 100,000 barrels per day.



ConocoPhillips Alaska

Investment looks to be \$2-3 billion over four to five years, with first oil flowing by 2024 to 2025. An additional \$2-3 billion would then be spent on cumulative drilling over multiple years to sustain production.

The Willow discovery involves reservoir sands in the Nanushuk formation, in a near identical geologic setting to the huge Pikka/Horseshoe field that Oil Search and partners Armstrong and Repsol plan to develop on the other side of the Colville River.

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LAWSUIT RESPONSE

In its July response the state denied that any public process is required for issuance of advisory bulletins and denied that the Tax Division of the Department of Revenue "adopted" the 2017 advisory bulletin. The state also denied that it was required to rescind the 2011 advisory bulletin, and "denies any characterization of the 2017 Advisory Bulletin inconsistent with its text."

The state said in its response that Revenue "admits that Revenue Online allows taxpayers the option to enter tax credits in any order" but "denies that such an option relieves taxpayers of the duty to accurately report and pay tax."

The complaint argued that prior to the 2017 advisory bulletin, "DOR's mandatory tax reporting system

Revenue Online allowed taxpayers to apply the Sliding Scale Credit to a taxpayer's tax liability first and then apply the New Oil Credit and Other Credits to the remaining tax liability." Prior to the 2017 advisory bulletin, the complaint said "DOR acknowledged in the 2011 Advisory Bulletin that North Slope Producers could reduce their tax liability below the Minimum Tax by using the New Oil Credit and the Other Credits."

In its response the state denied that characterization of the 2011 advisory bulletin and said that bulletin "speaks for itself."

The state denied the allegations that Exxon and Hilcorp would be liable for "retroactive taxes," and said they "may owe tax due to Alaska Statutes and the Alaska Administrative Code."

As for advisory bulletins interpreting statutes, the state cited Alaska statute as providing that "the depart-

ment may issue ... advisory bulletins stating the department's interpretation of provisions of this chapter and of regulations adopted under this chapter." The state said that "advisory bulletins are non-binding."

The complaint had requested that the court find the 2017 advisory bulletin "contrary to law and therefore void" and that Revenue is prohibited from enforcing the bulletin's conclusions, analysis or methodology.

The state asks that the complaint be dismissed with prejudice, that the plaintiffs be awarded no relief and that the defendant be awarded its attorneys' fees and costs of defending the suit.

The case is scheduled to be heard in 2019.

—KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

continued from page 1

TRANS MOUNTAIN

than they receive from buyers in the United States.

Ironically, the verdict was delivered less than an hour before shareholders of Kinder Morgan (the owner of Trans Mountain) voted by 99 percent in favor of selling the existing 300,000 bpd Trans Mountain system to the Canadian government for C\$4.5 billion, plus the rights to add 590,000 bpd of new capacity to the pipeline.

The hunger for an expanded Trans Mountain was reflected in producer nominations for space on the pipeline which were oversubscribed by 46 percent in July and 43 percent in June.

Government options

The government of Prime Minister Justin Trudeau now has the option to return the Trans Mountain application to the NEB for review and to meet the federal court's demand for a new phase of consultation with First Nations affected by the project, or to appeal directly to the Supreme Court of Canada.

Appeal court Justice Eleanor Dawson said the Trudeau government had failed, despite nine months of consultations, to "engage, dialogue meaningfully and grapple with the real concerns of (indigenous communities) to explore the possible accommodation (of their) concerns. The duty to consult was not adequately discharged."

The court also said the NEB review of Kinder Morgan's application did not give

full consideration to the impact an increased number of tankers sailing out of the Port of Vancouver would have on the region's resident killer whales.

Alberta Premier Rachel Notley, after reveling in 17 earlier decisions by various courts that endorsed the Trans Mountain plans, made no effort to hide her anger, faced with estimates that losing the pipeline expansion could reduce Alberta's Gross Domestic Product by 1.5 percent to 2 percent by 2023.

"Alberta has done everything right and we have been let down," she said. "It's a crisis."

Other observers noted that delays in conducting regulatory hearings have resulted in a net divestment of C\$8.6 billion in energy and mining investment over the last 15 months.

Call for emergency session

At the same time Notley called on Trudeau to hold an emergency session of Parliament and to appeal the case to the Supreme Court, she also delivered a blow to Trudeau's goal of imposing a federal carbon tax as the key underpinning of his climate change initiative.

She said Alberta will withdraw from the strategy by refusing to raise the province's current tax of C\$30 a metric ton to C\$40 in 2021 and \$50 in 2022, joining Ontario and Saskatchewan in their legal fight against the tax

However, Notley said that if the federal government "acts boldly and gives this crisis the attention it deserves," there might still be a chance of work resuming on Trans Mountain by early 2019.

"No one in Canada should accept that

the only way to sell Canada's resources is through the United States," she said. "No other country on Earth would accept this and Canada shouldn't either, especially when we are doing it to ourselves."

Notley's fear now, even though the appeal court verdict was out of Alberta's control, is that she could be ousted from power in the provincial election expected in May 2019.

Lori Williams, a political scientist at Calgary's Mount Royal University, said Notley was already "facing an uphill battle (in the next election campaign) and the hill just got steeper. As a single issue (Trans Mountain) is not as consequential for Justin Trudeau as it is for Rachel Notley."

However, as some of the initial fury over the appeal court verdict subsides some analysts have noted that the 250-page judgment and its 800 clauses contain possible hope for Trans Mountain, even going as far as suggesting a two-step rescue plan.

The panel of judges said the federal government cabinet could refer the project back to the NEB for "reconsideration," including taking into account concerns raised by the court about the impact of tankers on marine safety and species at risk, especially the whale population.

The judges suggested a "reconsideration" could take into account any factors specified by the federal cabinet, including strengthening the Trudeau government's C\$1.5 billion ocean protection plan, which they found "insufficient."

Time limit

In a telling comment, the court also said the federal cabinet would be within its rights to "specify a time limit, within which" the NEB should complete its reconsideration.

Equally significant, the court said the government did not have to secure consent from each of the five First Nations who triggered the court case, or unanimity among all of those nations.

The judgment made it clear that the obligation to meaningfully consult with First Nations and, if possible, accommodate their interests can be complex and demanding, but they do not imply a veto.

"Canada is not to be held to a standard of perfection in fulfilling its duty to consult," the appeal court said.

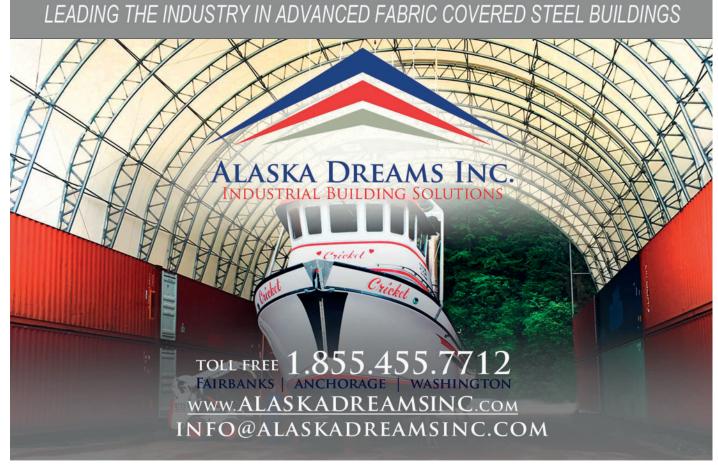
"At the same time, indigenous claimants must not frustrate (the government's) reasonable good faith attempt, nor should they take unreasonable positions to thwart the government from making decisions or acting in cases where, despite meaningful consultation, agreement is not reached."

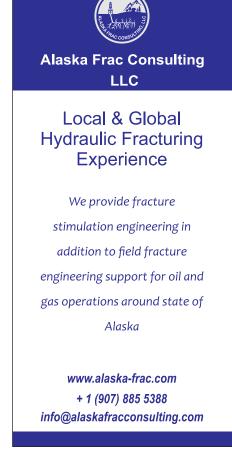
Judge Dawson said the concerns of indigenous applicants are "specific and focused ... this means that the dialogue Canada must engage in can also be specific and focused."

"This may serve to make the corrected consultation process brief and efficient while ensuring it is meaningful. The end result may be a short delay (in construction)."

But that glimmer of hope could easily be shredded in British Columbia, which has a long history of getting bogged down in legal fights over resource development.

Contact Gary Park through publisher@petroleumnews.com





FINAL ORDER

tons of LNG per year.

AGDC had initially hoped to have its environmental impact statement in hand by the end of this year and begin project construction in 2019. AGDC President Keith Meyer told the board earlier this year that the final EIS was now expected in the first half of 2019.

Even that proved too optimistic.

FERC's first notice of schedule, issued in March, identified Dec. 9, 2019, as the final EIS issuance date, but the commission said Aug. 31 that its staff has revised the schedule for the final EIS issuance based on AGDC "providing complete and timely responses to any future data requests," and also assuming that cooperating agencies provide their input "on a timely basis."

The notice of availability for the final EIS is now set for Nov. 8, 2019, with the 90-day federal authorization decision deadline for Feb. 6, 2020.

12 applications

FERC said Aug. 31 that it had issued environmental schedules for 12 liquefied natural gas export terminal applications, reflecting its efforts to streamline its review process.

FERC Chairman Kevin McIntyre said significant strides in streamlining the commission's regulatory progress is a response to increasing numbers and greater complexity of LNG applications it is receiving. "These process improvements have shortened projected environmental schedules in some cases by nine to 12 months," he said.

"There is widespread acknowledgement that the United States is poised to play an important role in serving worldwide LNG demand, and its ability to serve that demand quickly will serve the nations national security and economic interests," McIntyre said.

FERC has added to its LNG staff. It has also taken steps to save staff time, including: signing an agreement with the Pipeline and Hazardous Materials Safety Administration to coordinate siting and safety review of LNG facilities; hiring an outside contractor to assist in construction inspections; and working with project applicants to hire third-party contractors to conduct analyses.

In late June FERC asked AGDC to consider providing a third-party contractor to assist FERC staff in reviewing engineering design for the Alaska LNG Project.

In addition to the Alaska project, other LNG projects

affected by the issuance of regulatory schedules include: Freeport Train 4, Port Arthur, Driftwood LNG, Corpus Christi, Texas LNG, Gulf LNG, Rio Grande LNG, Jacksonville Eagle, Annova LNG, Plaquemines and Jordan Cove.

Alaska schedule

AGDC said Sept. 5 that the revised schedule puts the Alaska LNG project on tract for approval a month earlier than originally anticipated.

"FERC's accelerated schedule is a strong signal to potential customers and investors that Alaska LNG is steadily advancing through the regulatory process," said AGDC's Meyer. He credited AGDC's technical staff with providing responses to nearly 1,500 FERC data requests and agency comments.

AGDC Senior Vice President Frank Richards said, "FERC's efforts to streamline its review process is already having a positive impact on the Alaska LNG project," noting innovative efforts by FERC staff to expedite the process for environmental review and permitting.

—KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

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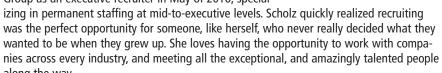


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Sequoyah Scholz, a life-long Alaskan, is proud to be in a position that has such an impact on the local economy and people. She began her career with Opti Staffing Group as an executive recruiter in May of 2016, special-





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NEWS STARTUP

companies say — along with weak, crumbling sandstone reservoir rock that broke loose to clog wellbores and damage equipment.

Now new drilling and production technologies and years of tinkering, mainly with ways of controlling the loose sand, have turned the corner, making the West Sak wells profitable at current oil prices, Michael Driscoll, ConocoPhillips' supervisor of viscous development, said in an interview.

ConocoPhillips, BP and Hilcorp Energy, all North Slope producers, are producing from viscous oil deposits in conventional fields they operate, but ConocoPhillips has been the most constant in exploiting the resource.

Work began in mid-1980s

When work on West Sak viscous oil began in the mid-1980s the best well rates were 250 barrels per day, with flow rates impeded by the cool temperature of the oil, which is produced from a shallow reservoir, relative to crude produced from deeper conventional reservoirs, where oil is warmer and flows more easily.

An added complication was the loose nature of the sandstone, which tended to break apart, releasing sand when oil was extracted. This led to holes being formed in the rock, called "worm holes," which allowed productive zones to be bypassed.

Multilateral wells are expensive
— each of the horizontal legs at
NEWS takes about 50 days to
drill. But the wells produce more
oil, enough to compensate for the
higher costs, said Federico
Caldelas, senior reservoir
engineer on NEWS.

Early experiments with screens to keep sand out of the well bores failed when screens became clogged. Other efforts, on earlier West Sak wells, involved just letting the sand flow out with the oil. But then the sand had to be removed from the wells and pipeline, which became expensive.

What didn't help the West Sak economics was the lower quality of the oil, ranging from 16 to 19 degrees API gravity compared with Prudhoe Bay oil at 29 degrees API.

Despite these problems the huge oilin-place resource was a tempting target. State geologists estimated the viscous oil resource at 5.5 billion barrels to 7.5 billion barrels overlaying the Kuparuk, Prudhoe Bay and Milne Point fields.

Although only a small part of this will be economically produced, it's still a lot of oil

Multilateral wells

ConocoPhillips is now boosting West Sak well rates to rates of 5,000 bpd by using multilateral wells, where separate producing legs are drilled off a single vertical well to surface.

At ConocoPhillips' latest West Sak development, in its NEWS project in the Kuparuk River field, five horizontal producing legs, each about 7,000 feet in length, feed oil into the vertical well.

Drilling horizontal multilateral wells was a technique pioneered by ARCO Alaska, ConocoPhillips's predecessor on the North Slope, and later BP, primarily to tap thin lateral oil sands in the West Sak and conventional fields that were economically marginal.

The lateral horizontal wells are exposed to much more of the oil-bearing rock than would be the case with a conventional vertical producing well and having several of them shares the cost of the vertical well and surface infrastructure.

There are longer single lateral producing wells being drilled on the North Slope but the West Sak wells are challenging because they are shallow, at depths of 6,000 feet, compared with deeper conventional wells at depths like 9,000 feet, said Ryan Phelps, staff geologist on the project.

Drilling shallow requires the drillers to turn the vertical surface well at higher angles to reach 90 degrees, which isn't easy. Keeping the drill bits in the West Sak sand layers, which can be as thin as five feet in thickness, is also tricky, Phelps said.

Wells expensive

Multilateral wells are expensive — each of the horizontal legs at NEWS takes about 50 days to drill. But the wells produce more oil, enough to compensate for the higher costs, said Federico Caldelas, senior reservoir engineer on NEWS

Driscoll said ConocoPhillips is also making progress on sand control, using a new type of ultra-fine mesh screen that seems to be working.

Another problem that developed when waterflooding was introduced, in an attempt to boost production rates, were "breakthroughs" of water through loose rocks so water went straight to the producing well instead of pushing oil ahead of it to the well.

This problem, technically called a "Matrix Bypass Event," has bedeviled all companies working on viscous oil. At NEWS it is now being mitigated by using a down-hole device that targets microapplications of water to specific layers of oil-bearing sand, a Waterflood Regulation Valve. These have been used for some time in other North Slope fields, like Prudhoe Bay, but this is the first application in the viscous oil deposits. "We're now able to surgically put the

water exactly where we want it be," Driscoll said.

November 2017

NEWS began operating in November 2017, about three months ahead of schedule, and is now producing about 10,000 bpd with three producers currently on line. A fourth well will start producing in mid-September, which will boost output. ConocoPhillips had estimated peak production at 8,000 bpd initially.

Driscoll said the higher production is a result of better-than-expected reservoir performance and growing experience in working with the reservoir. However, ConocoPhillips has also reduced the cost of the project by 45 percent, he said, through aggressive efforts at cost-cutting and managing development more efficiently.

The lower production cost is really the result of a concentrated effort to cut West Sak expenses made after oil prices plummeted in 2015. NEWS was just beginning development then, "but management halted the program and told us to find ways to cut costs," Driscoll said.

The team got creative. Among several measures, water-based drilling fluids were substituted in the plan, for at least some wells, in lieu of more expensive oil-based drilling fluids. This change was made after the company determined the water-based fluid could be as safe and effective as oil-based fluid.

Drilling fluids are critical to the safe operation of drilling. They are used during drilling to sustain pressure down in the well, preventing an oil or gas "blowout," an uncontrolled release, as well as to lift rock and cuttings out of the drill hole to the surface for disposal.

These steps now made ConocoPhillips more confident it can put viscous into the company's long-term North Slope development plans, company spokesperson Amy J. Burnett said. "This has now gone mainstream for us," she said.

The company is now planning its new phase, Eastern NEWS, in an adjacent area. It is planned to be producing in 2023, according to a ConocoPhillips presentation to investors made July 16.

Driscoll said he believes the same kind of incremental technical leaps that have made West Sak viscous oil economically viable can be applied at Ugnu, the huge heavy oil resource that has also be identified on the slope. Ugnu oil is even thicker or more difficult to produce than the viscous oil.

Editor's note: Tim Bradner is editor of the Alaska Economic Report and is 2018 Atwood Professor of Journalism at the University of Alaska Anchorage.

PIPELINES & DOWNSTREAM

Enbridge, Fond du Lac Band reach line deal

Enbridge Energy and the Fond du Lac Band of Lake Superior Chippewa have reached an agreement to build the Line 3 replacement oil pipeline through the band's reservation in northeast Minnesota.

Both sides announced the agreement Aug. 31. Financial terms are confidential. The agreement gives Enbridge easements for six existing oil pipelines through 2039. Enbridge plans to build the new pipeline in an expanded right-of-way adjacent to existing pipelines on the reservation.

The band has also agreed not to participate in any opposition to the project, but may comment on environmental, cultural or other issues affecting the band.

Line 3 was built in the 1960s. It carries Canadian crude from Alberta through North Dakota and Minnesota to Enbridge's terminal in Superior, Wisconsin. Opponents say the project poses risks of oil spills. Enbridge says the replacement will be safer.

—ASSOCIATED PRESS



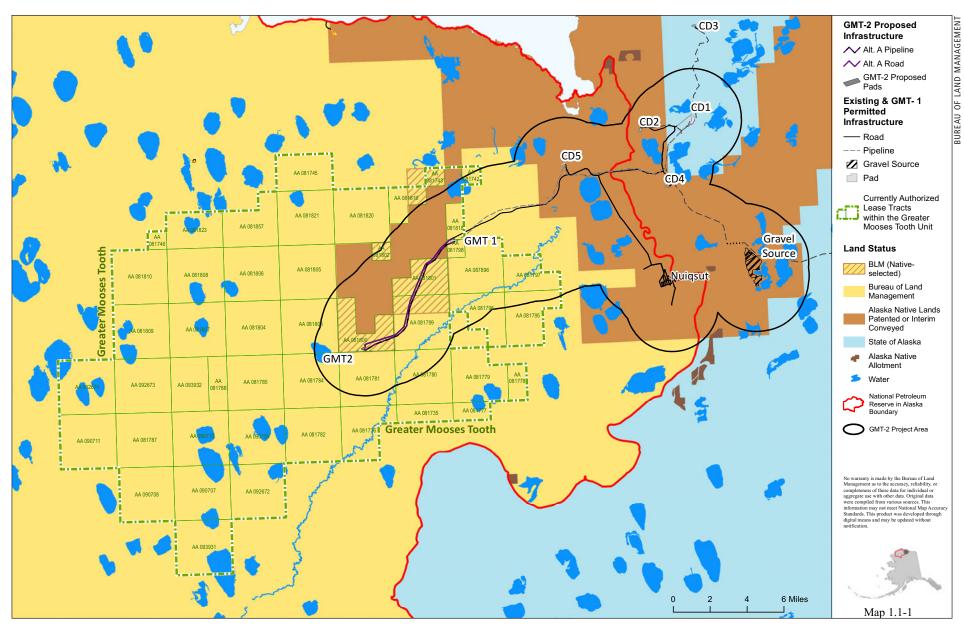
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FINAL SEIS

for oil and gas development.

BLM will prepare a record of decision for the GMT-2 development once the final SEIS has been announced in the Federal Register for at least 30 days.

Impacts on surface resources

The SEIS says that the impacts of the GMT-2 development on surface resources, in particular subsistence resources, have been key issues for consideration. In terms of subsistence impacts, the proximity of the village of Nuiqsut to the development site is of particular significance. Potential restrictions in access to subsistence hunting and potential changes in land use by resources such as caribou are concerns.

An analysis of subsistence impacts found that the GMT-2 project "may significantly restrict subsistence activities for the village of Nuiqsut, and the cumulative effects of GMT-2 and other developments on the North Slope may significantly restrict subsistence activities for the villages of Nuiqsut, Anaktuvuk Pass, Atqasuk and Utqiagvik," the SEIS says.

However, the SEIS also considered the potential economic benefits to Alaska Native communities from the development, as well as a range of other possible impacts, including impacts on global climate change, on water quality and on air quality.

Mitigation against adverse impacts includes ConocoPhillips' commitment to use existing lease stipulations for the Greater Mooses Tooth unit. The company supports subsistence activities through financial contributions and has incorporated features, such as subsistence pullouts on access roads, into its design for the project, the SEIS says. However, the company has requested two deviations from stipulations in the Integrated Activity Plan: The deviations relate to the distances of facilities from water bodies and the distances between pipelines and roads. BLM will rule on the deviation requests in its record of decision for the SEIS.

Evolving plan

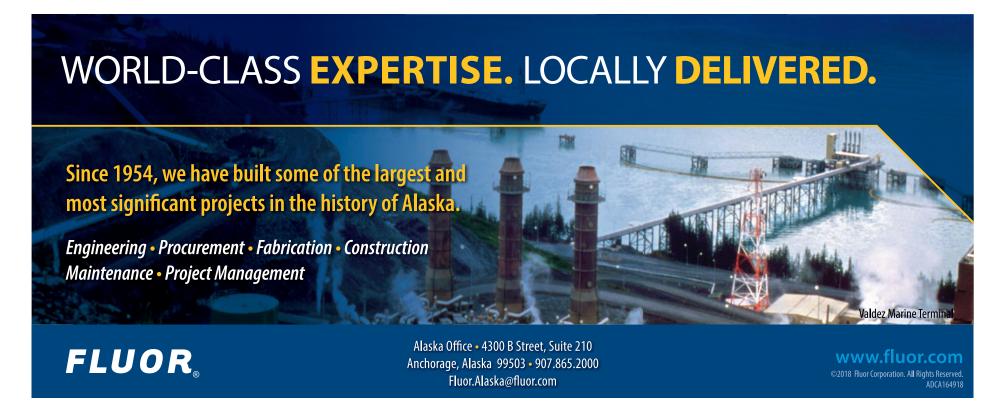
The plan for the GMT-2 project has changed somewhat, since the initial development concept was published in 2004 in the EIS for ConocoPhillips' Alpine satellite development plan. The development involves an oil accumulation discovered in Alpine sandstones, in particular by the Spark and Rendezvous exploration wells. Initially, the idea was to develop the oil from a 9.1-acre pad accessed by a 6.3-mile gravel road. In 2014, based on updated reservoir information, the proposed pad location was moved 3.2 miles to the south. This, however, would have placed the pad in the Colville

River Special Area, an area of particular environmental sensitivity. Consequently, the proposed pad location was moved again, to a location that would be acceptable from an oil production perspective while also mitigating environmental impacts.

The evolution of the development plan also involved an increase in the pad size to 14 acres and an increase in the planned number of development wells from 20 to 48. The required access road length increased to 8.2 miles, and the development requires a pipeline system 8.6 miles in length. No new bridges are required. Gravel for the project will come from an Arctic Slope Regional Corp. gravel mine. The planned pad will be located entirely on federally managed land. The proposed pipeline and road corridors cross both federally managed land and land owned by Kuukpik Corp., the Native village corporation of Nuigsut

A pipeline segment between the GMT-2 and GMT-1 pads will have vertical support members carrying a 20-inch produced fluids pipeline, a 14-inch injection water pipeline, a 6-inch gas pipeline, an 8-inch miscible injectant pipeline, and power and fiber optic cables. The support members will have space for an additional 24-inch pipeline, the SEIS says. Pipelines required for GMT-2 would be placed on existing vertical support members that carry pipelines from GMT-1 to the Alpine process-

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coming decades, the company had developed a plan that would simplify processes by focusing on maintenance; would optimize the company's operating infrastructure; would continue with technical innovation; and would strengthen the company's high performance culture.

Barrett commented that, directly or indirectly, his company primarily engages in activities focused on the maintenance of the pipeline and Valdez Marine Terminal infrastructure. However, the manner in which the company is currently organized is more appropriate for a construction company, he said. Consequently, the company is realigning into three divisions: operations and maintenance; engineering and risk; and chief operating officer. The leadership is already in place for this reorganization and has begun planning how to implement the new business strategy. This strategy includes the clarification of decision authority and the delegation of decision making to managers in the field, expediting decision making and actions through the empowerment of people in the work environment.

Simplified processes

The new strategy also involves simpli-

fying maintenance processes, to better identify high priority work while also applying risk-based decision criteria for completing that urgent work and conducting other maintenance work quickly and efficiently. The company plans to use its engineering and risk management expertise to improve and strengthen its technical controls. And the emergency planning and response functions for the pipeline, the marine terminal and the marine escort system out of Valdez will be centralized. The company will continue to expand the use of modern technology.

Most jobs in the company will be impacted in some way by the various changes, and the size of the workforce will drop, with negative impacts for some and new opportunities for others, Barrett wrote. Alyeska anticipates notifying all employees by early November of actions affecting them, he wrote.

"It will be a fundamental and challenging change to our work, but one that is necessary to ensure the future operational reliability and efficiency of TAPS," Barrett wrote. "I am acutely sensitive to the impacts this will have on our people, who in the past and moving forward are the foundation of our success."

—ALAN BAILEY

Contact Alan Bailey at abailey@petroleumnews.com continued from page 11

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ing facilities.

ConocoPhillips has proposed two alternative development schedules for the project, one starting in the fourth quarter of 2018 and the other starting in the fourth quarter of 2019. Both would see construction completed in the fourth quarter of 2021, at which point oil production would begin. Construction would take place during the winter, making use of seasonal ice roads and ice pads.

Alternatives considered

In addition to its preferred alternative, BLM considered two other alternatives: an alternative involving a different road alignment, and a roadless alternative that would have more facilities on site and, thus, involve more limited site access. The agency also considered a "no action" alternative but commented that BLM cannot deny permits to drill, associated with appropriate mitigation measures, on land leased for oil and gas activities.

BLM considered but rejected as impractical or uneconomic some other possibilities including the use of buried pipelines, a roadless development with seasonal drilling, and the establishment of an operations center in the village of Nuiqsut.

Reactions to the SEIS

"(Interior) Secretary Zinke made a commitment last year to 'jump-start' Alaskan energy and this project is a great example of the Department of the Interior following through on that," said Joe Balash, Interior's assistant secretary for land and minerals management, in response to the publication of the SEIS. "Oil and gas development in the NPR-A is important to meeting our nation's energy needs and this analysis provides a responsible path forward in balance with resource protections. And, throughout the process we are proud of our efforts of involving the people most affected by development activities on the North Slope of Alaska."

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"This is great news for Alaska and our nation," said U.S. Sen. Lisa Murkowski, R-Alaska. "This new development, which will produce an estimated 30,000 barrels per day, will help refill the trans-Alaska pipeline and provide Alaskans with good jobs. Development in the NPR-A also benefits our nation by increasing our energy security, keeping energy affordable, and reducing the federal deficit, so I appreciate the work the Department of the Interior has done to advance this project."

"I want to thank Secretary Zinke and BLM for keeping their promise to make Alaska a leader in our country's energy production," said Congressman Don Young, R-Alaska. "Responsible development of Greater Mooses Tooth will help keep our North Slope active and will bring much needed jobs to the local communities. I look forward to continuing to work with Secretary Zinke and the rest of the Department of the Interior to ensure Alaska energy production remains strong." ●

Contact Alan Bailey at abailey@petroleumnews.com

