BP: Teachers get chance to dip toes in Arctic Ocean; Air cargo, passenger growth at ANC airport

BP ALASKA HOSTED WINNERS of the 2018 BP Teachers of Excellence on a tour Prudhoe Bay on Aug. 2 to view BP operations, camps, the trans-Alaska oil pipeline and even dip their toes in the Arctic Ocean. Participants spent the previous day in the classroom with Alaska Resource Education, or ARE, learning hands-on activities to teach students about Alaska’s resource industries as part of ARE’s “Rock and Roll Around Alaska” teacher course.

Staff from Alaska Process Industries Career Consortium, see INSIDER page 8

PTE files for tariff increase for line from Point Thomson to Badami

PTE Pipeline LLC has filed a revenue requirement study and a proposed new tariff, $20.84 per barrel, for transportation from Point Thomson to Badami. Point Thomson condensate production began in the spring of 2016; the Regulatory Commission of Alaska accepted a settlement rate of $12.09 per barrel effective April 1, 2017, based on expected volumes through the line. That rate was to end when PTE Pipeline placed new rates into effect, no later than July 1, 2019. The $12.09 per barrel rate replaced a rate of $17.56 per barrel, which replaced the original proposed rate of $20.39.

The Point Thomson Export Pipeline transports condensate from Point Thomson in a 22-mile, 12-inch liquids line from see TARIFF INCREASE page 10

Canada's shriveling upstream

What little hope might have stemmed from oil prices settling around US$70 a barrel has been crushed by new industry forecasts that 6,000 oil and gas wells will be drilled this year, 200 below the 2017 count and 500 fewer than the April forecast. Tom Whalen, chief executive officer of the Petroleum Services Association of Canada, said “several publicly traded Canadian service companies are reporting minimal improvement in the quality of bottom line earnings; many are sitting near breakeven or are still in negative territory.”

He said Canadian companies are unable to gain from higher world prices because pipeline capacity is inadequate to deliver products to market, resulting in higher-than-usual discounts for heavy crude from Western Canada, while natural gas prices of $1.55 per thousand cubic feet are languishing because of competitive long-term natural gas contracts.

The play particularly revolves around findings from the Stinson No. 1 well, drilled by ARCO in 1989, and the Alaska State A1 well, drilled by see SIX SISTERS page 11

An overlooked play?

Line of Beaufort Sea wells provide evidence for oil potential in east

By ALAN BAILEY
Petroleum News

While interest in North Slope oil exploration of late has tended to focus on the western part of the region, with major new finds in the Nanushuk and Tokok formations, there are other intriguing possibilities more towards the east. And moves towards the conducting of oil and gas lease sales in the coastal plain of the Arctic National Wildlife Refuge will presumably drive interest in that easterly direction.

For some time now geologist Robert Blodgett and oil industry consultant Steve Sutherland have been investigating what Blodgett terms the Six Sisters play, a play relating to a chain of six exploration wells drilled quite a few years ago along a

The scoping starts

BLM seeks public comments for EIS for ConocoPhillips NPR-A development

By ALAN BAILEY
Petroleum News

The federal Bureau of Land Management is seeking public comments on the scope of an environmental impact statement for ConocoPhillips’ proposed development of the Willow oil prospect in the northeastern NPR-A, the agency announced Aug. 7. BLM plans to hold public meetings in the communities of Anchorage, Pasqua, Nuiqsut and Uigvikagvik, and in Anchorage and Fairbanks. Comments are required by Sept. 6.

Master development plan

The EIS preparation relates to a master development plan for Willow that ConocoPhillips filed in May. The intent of the master plan was to trigger the EIS development, enabling a single EIS to be prepared to consider the environmental impacts of the Willow project. Although the plan specifies ConocoPhillips’ anticipated means of developing the Willow oil field, the company has yet to prepare a full-scale development plan or to make a final investment decision for the project.

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,” said BLM Acting State Director Karen Mountain. “Public input on this project is important and we look forward to hosting public see WILLOW SCOPING page 9

Pipeline factsions dig in

Trans Mountain opponents set up protest camp; construction set to start in 2019

By GARY PARK
For Petroleum News

Work on expansion of Canada’s Trans Mountain oil pipeline is to resume shortly after a four-month lull in construction activities that gave anti-pipeline factions time to establish a protest camp close to Kinder Morgan’s Burnaby shipping terminal in the Port of Vancouver.

At the same time, the company has indicated that the planned in-service date for the new parallel pipeline (increasing Trans Mountain’s capacity from the Alberta oil sands to 890,000 barrels per day from the existing 300,000 bpd) will be delayed by a year from the original targeted startup date to December 2020.

Ian Anderson, president of Kinder Morgan’s

Anderson also acknowledged that a new regulatory hurdle has surfaced that could make the change of ownership subject to U.S. approval because the purchase includes a spur line delivering Canadian crude to Puget Sound refineries in Washington state.

Canadian unit, said the company will resume work in August to secure, survey and prepare the right of way and cooperate with First Nations to look for traditional aboriginal artifacts. He said the timetable now calls for “laying physi see PIPELINE FACTIONS page 9
EIA: US crude oil production up for July

Brent spot averaged $74 per barrel in July; EIA expects 2018 average of $72, dropping to $71 in 2019, with WTI averaging $6 lower

By KRISTEN NELSON
Petroleum News

The Brent crude oil spot price averaged $74 per barrel in July, largely unchanged from June, the U.S. Energy Information Administration said Aug. 7 in its Short-Term Energy Outlook.

EIA said it expects Brent to average $72 this year and $71 in 2019, with West Texas Intermediate averaging about $6 per barrel lower than Brent in both years.

“Higher production from OPEC and Russia, compared with the first half of this year, probably put downward pressure on crude oil prices in recent weeks, and we continue to expect Brent crude oil spot prices to fall towards $70 per barrel by the end of 2018, as the market appears to be fairly balanced in the coming months,” Dr. Linda Capuano, EIA administrator, said in an Aug. 7 statement on the forecast.

The agency said crude oil prices declined in July “as several key oil producers increased production from the first half of 2018 and as a major supply disruption (the unplanned supply outage in Libya in July) that many analysts expected to persist for several months was resolved quickly.” Production from several Organization of the Petroleum Exporting Countries and others was expected to be higher for July, compared with the first half of 2018, EIA said. This was offset by threats from Iran to block the Strait of Hormuz, and Saudi Arabia’s halting of shipments through the Bab al-Manedeb strait due to attacks from Yemeni Houthi rebels.

“This increased disruption risk could be contributing to higher price volatility,” the agency said.

“Even though EIA sees oil prices continuing to moderate in the coming months, global oil inventories are below five-year average levels and OPEC spare capacity is low, which could contribute to price volatility and possible price increases if supply disruptions occur,” Capuano said.

Inventories remain slightly below the five-year, 2013-17, average, EIA said, “and any actual outages could cause crude oil prices to increase.”

EIA’s Brent forecasts are $2 higher than the agency’s July forecasts, reflecting lower forecasts for 2019 global oil supply only partially offset by lower forecast demand, the agency said.

US production
U.S. crude oil production is estimated to have averaged see OIL PRODUCTION page 3
US-China trade dispute hits oil prices

As part of an escalating situation, China plans to slap tariffs on US LNG, seemingly impacting plans to export Alaska gas to China.

By KAY CASHMAN
Petroleum News

As the market closed for crude oil on Aug. 7, prices continued to climb and then dropped on Aug. 8, bearing out analyst warnings that the rise to $150 per barrel oil wouldn’t be smooth.

Following a dip a few days earlier, prices recovered. Alaska North Slope, or ANS, crude was at $75.21, up 36 cents from the day before when it closed at $74.84.

But prices again fell on Aug. 8 by about 3 percent as the United State-China trade dispute heated up, CNBC reported.

China threatens tariff on oil, gas exports from U.S.

Oil prices fell sharply in part because China threatened to put a 25 percent tariff on $16 billion of U.S. goods, including oil, responding to President Donald Trump’s plan to slap the same tariff on an equal amount of Chinese imports in the coming weeks, CNBC reported, noting “the mounting trade tension has raised concerns that global economic growth will slow, lowering demand for crude oil in the process.”

On Aug. 3, China said it planned to place tariffs on U.S. liquefied natural gas, which bodes poorly for Alaska Gov. Bill Walker’s plans to build a gas pipeline from the North Slope, with most of the gas going to China.

“It’s certainly going to impact on movement between the U.S. and China, making it less efficient, meaning pressure on prices here,” Andrew Lipow, president of Lipow Oil Associates, told CNBC.

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“The August short-term outlook estimates U.S. crude oil production held steady just under 11 million barrels per day in July. We’re expecting production to rise by about 1 million barrels per day in the coming year, with production almost reaching 12 million by the end of next year,” Capeuso said.

Natural gas

“With U.S. natural gas production rising to record levels this year, prices will likely be lower than they would be otherwise, against a backdrop of low inventory levels and increased demand from the power sector,” Capeuso said.

EIA said it estimates U.S. dry natural gas production was 81.8 billion cubic feet per day in July, up 0.4 bcf from June, and is forecasting production to average 81.1 bcf per day this year, up 7.5 bcf per day from 2017 — "a new record high." 2019 natural gas production is projected to rise to 84.1 bcf per day.

“Continuing developments in natural gas, including drilling productivity improvements and new infrastructure, factored into EIA’s August forecast for U.S. natural gas production, which we currently expect will exceed 84 billion cubic feet per day for all of 2019,” Capeuso said.

Pipeline exports of natural gas averaged 6.7 bcf per day last year, are forecast to average 7 bcf this year and 8.5 bcf in 2019, EIA said. The agency cited increased U.S. natural gas production and completion of new pipelines, with two new pipelines in Mexico placed in service in June that will deliver U.S. natural gas from destinations in Mexico.

Exports of liquefied natural gas, 1.9 bcf per day last year, are forecast at 3 bcf per day this year and 5.1 bcf in 2019, with net U.S. exports of natural gas expected to average 2 bcf in 2018 and 5.4 bcf in 2019, compared with 0.3 bcf in 2017. EIA said.

Henry Hub natural gas spot prices are expected to average $2.96 per million British thermal units this year and $3.10 in 2019.

Financials

EIA said first-quarter financials showed that cash flow from 2012 U.S. publicly traded oil and natural gas producers with production of natural gas representing at least 60 percent of their output rose to $4 billion in the first quarter, the highest since the third quarter of 2014. Natural gas production for these companies increased 12 percent in the first quarter from a year earlier, resulting in higher upstream revenue and cash flow from operations.

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WITI oil prices hardest hit

ANS prices were not available for Aug. 8 as this issue of Petroleum News went to press, but West Texas Intermediate, or WTI, crude futures ended the day at a seven-week low, dropping $2.23, or 3.2 percent, to $66.94.

According to an Aug. 7 story from Bloomberg, the pace of U.S. crude output growth looked to be slowing, which bodes well for oil prices.

The increase was attributed to a new report from the U.S. Energy Information Administration, which dropped its estimate for domestic oil production from 11.8 million barrels per day to 11.7 million bpd.

Part of the problem seems to be output from the Permian basin in the southern U.S., where drilling plateaued in late June, possibly due to pipeline constraints that have dropped wellhead prices in the area.

Halliburton warned that second-half 2018 profits would suffer on a slowdown in the Permian and other parts of the U.S., “citing pipeline shortages and other issues that will delay work in the Permian and Marcellus basins,” Bloomberg said.

“U.S. crude stockpiles are seen falling as the driving season continues, helping oil hold near $69 a barrel,” Will Yun, a commodities analyst at Hyundai Futures Corp., told Bloomberg Aug. 6. “At the same time, oil’s being pulled from the other side, with the ongoing trade dispute between the U.S. and China putting downward pressure on commodities including oil.

Trump means what he says about sanctions

As for Iran, Newsweek reported Aug. 8 that while Trump wants lower oil prices and presses the Organization of the Petroleum Exporting Countries, or OPEC, to increase market supply, his withdrawing the U.S. from the Iran nuclear deal and re-imposing economic sanctions will drive oil prices even higher.

On Aug. 7, “the sanctions on Tehran kicked back in and will escalate further later in the year. It puts American allies who still support the Iran nuclear deal, particularly the European Union, or EU, in a difficult position,” the news magazine said.

As Trump said in one of his infamous tweets, “Anyone doing business with Iran will NOT be doing business with the United States.”

The EU trades with Iran, which includes buying oil. It instructed businesses to continue to do so if they wish, despite American sanctions.

“But companies all over the world, including those inside the EU, will weigh the cost of losing American business against continuing to trade with Iran,” Newsweek said.

And that will impact oil prices by creating doubt about Iran’s ability to continue selling its oil in global markets now that the U.S. is pushing Iran out of the market.

Trump pulled out of the nuclear deal because Iran defied the 2015 deal under which sanctions were dropped in exchange for allowing inspectors to verify that its nuclear program was not about making weapons.

Financials

Among 2017 and the first quarter of 2018, natural gas production steadily increased while capital expenditures remained relatively flat,” EIA said.

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Hilcorp Alaska wants Northstar gas injection

Hilcorp Alaska has applied to the Alaska Oil and Gas Conservation Commission for permission to inject into the Beaufort Sea field’s Kuparuk pool for enhanced oil recovery

By ALAN BAILEY
Petroleum News

Hilcorp Alaska has applied to the Alaska Oil and Gas Conservation Commission for permission to inject natural gas into the Northstar field’s Kuparuk oil pool for enhanced oil recovery.

Depending on the quantity of gas injected, ultimate oil recovery from the pool could increase from 9 million barrels to somewhere between 13 million and 14.6 million barrels, Hilcorp told the commission.

Since Northstar first came into production in 2001, oil has come from a reservoir in the Ivishak formation, equivalent to the main reservoir of the onshore Prudhoe Bay oil field. In 2006 BP, then the Northstar field operator, began testing production from shallower Kuparuk sands.

Sustained production from a single well, the NS-08, in the Kuparuk started in 2010. According to Hilcorp’s application to the AOGCC, Northstar currently has 30 wells, three of which are shut in. Hilcorp continues to produce from the Ivishak, but now produces from Kuparuk sands through three wells, the NS-08, the NS-15 and the NS-18.

Enhanced oil recovery history

Originally, a blend of gas from Northstar and imported gas from the Prudhoe Bay field was used for enhanced oil recovery from the Ivishak. However, in 2005 injection switched from miscible injectant to injectant with a higher proportion of gas.

In 2010, when Kuparuk gas became available for injection into the Northstar field’s Kuparuk pool for enhanced oil recovery, with the terminations of the gas supply from Prudhoe in 2014, just gas from the NS-08 well was used for the Ivishak injection.

But, with the addition of the NS-15 and NS-18 wells in 2016 and 2017, more Kuparuk gas became available for Ivishak production enhancement — increased gas production comes in particular from the NS-15 well, Hilcorp told the AOGCC. This has led to a restoration of pressure in the Ivishak reservoir to a level close to the reservoir’s original pressure, a phenomenon that has resulted in an improved proportion of oil to water production from the Ivishak.

“Enough gas for Kuparuk injection

Moreover, with there now being more than enough gas produced to support Ivishak production, there is adequate gas to begin injection into the Kuparuk, Hilcorp told the AOGCC. Injection would be achieved initially by converting the NS-18 well into an injection well. Further developments could include well reconfigurations, well workovers, well conversions for gas injection, and the expansion of Kuparuk enhanced oil recovery through the drilling or sidetracking of new wells. Hilcorp told the commission.

Total peak daily gas injection rates could go as high as 120 million cubic feet per day, with individual well injection rates anticipated to be some 50 million to 80 million cubic feet per day. However, rates will vary depending on the number of wells being used and the excess gas

CORRECTION

Nanushuk not youngest

An item in the July 29 issue of Petroleum News referred to Nanushuk as the youngest and shallowest petroleum-bearing rock sequence in Alaska’s Arctic.

Geologist David L. Kindly pointed out the error, saying “Both the informally named West Sak sands in the Kuparuk area and the Schrader Bluff of the Milne Point area are younger than the Nanushuk.” Petroleum News apologizes for the error.

EXPLORATION & PRODUCTION

Hilcorp applies for Milne disposal wells

Hilcorp Alaska has applied to the Alaska Oil and Gas Conservation Commission for permission to drill four disposal wells from the new Moose pad that the company has been developing in the North Slope Milne Point field.

The purpose of the wells is to dispose of produced water from the field by injecting it into the relatively shallow Ugnu formation. The field produces oil from deeper horizons in the Schrader Bluff, Kuparuk and Ivishak.

Hilcorp told the commission that the proposed wells would enable the disposal of relatively high salinity produced water, so that lower salinity water can be injected into field reservoirs for enhanced oil recovery.

The injection of low salinity water rather than more saline water is likely to increase the recovery of oil from the field by about 5 percent, the company said.

Apparently the company obtains low salinity water for enhanced oil recovery use from the Prince Creek formation, the ability to dispose of produced water through underground injection would enable more Prince Creek water to be used, thus improving the oil recovery from the field. The Prince Creek formation lies above the Ugnu and is isolated from the Ugnu by impervious rocks.

The new Moose pad is situated in the southwestern portion of the Milne Point unit. Hilcorp has planned the drilling of 50 to 70 wells from the pad, with drilling expected to start in the fourth quarter of this year and first production anticipated in November. Production should peak at around 16,000 barrels per day in 2020, with an estimated ultimate recovery of 30 million to 50 million barrels.

Water for injection into the proposed disposal wells would come from production from the Kuparuk sands. Sustained production from a single well, the NS-08, in the Kuparuk started in 2010.

According to Hilcorp’s application to the AOGCC, Northstar currently has 30 wells, three of which are shut in. Hilcorp continues to produce from the Ivishak, but now produces from Kuparuk sands through three wells, the NS-08, the NS-15 and the NS-18.

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State proposes ROW change for CIGGS

Change will allow Hilcorp to use one CIGGS line for shipping oil under Cook Inlet to eliminate need for the Drift River terminal

By ALAN BAILEY
Petroleum News

The Alaska State Pipeline Coordinator’s Section is proposing to approve a change to the right-of-way agreements for two Cook Inlet gas pipelines, to allow the lines to carry oil rather than gas. The right-of-way changes are required as part of Hilcorp Alaska’s Cross Inlet Extension Project, a project to enable the shipment of oil by pipeline west to east under Cook Inlet. The project will eliminate the need for the Drift River oil terminal on the west side of the inlet. Currently, crude oil is shipped by tanker from Drift River to Nikiski on the Kenai Peninsula. There are safety concerns associated with the terminal because of the terminal’s proximity to Redoubt Volcano.

CIGGS lines

The two gas lines being switched to oil transportation consist of one of the twin Cook Inlet Gas Gathering System, or CIGGS, lines that run under the inlet, and the CIGGS LP line that used to deliver natural gas produced from the Middle Ground Shoal field to the currently mothballed Nikiski fertilizer plant. Hilcorp is also constructing some relatively short sections of the twin pipelines to allow the current structure.

Conversion is anticipated in late summer, with the startup of oil transportation through the line planned for the fall, DNRR’s right of way approval document says.

Commissioned in 1972

The CIGGS pipeline system was originally commissioned in 1972. The twin pipelines are each 10 inches in diameter and 21.9 miles in length. Both pipelines have been operational since commissioning, with no known leaks, the approval document says. The CIGGS LP line is also 10 inches in diameter and is 3.77 miles in length. It was also constructed in 1972 and has no record of any leaks.

The state’s approval document says that repeated inspections of the CIGGS pipelines have revealed some wear but have found that the condition of the lines is well within acceptable operating standards. Regular inspections and maintenance of the system will continue, the document says. In addition, Harvest Alaska, the Hilcorp subsidiary that operates the company’s Alaska pipelines, will limit pressure in the converted CIGGS line to a maximum of 600 pounds per square inch, the document says.

Prior to a final decision on the right-of-way approval, the state requires public comments by Sept. 5.

continued from page 4

GAS INJECTION

supply from the Ivishak reservoir, Hilcorp told the commission.

The Kuparuk reservoir at Northstar lies in the Kuparuk C and Kuparuk A sands, along the crest of a four-mile by two-mile, east-southeast to west-northwest trending, faulted anticline. Available data indicate that there is an oil rim along the crest of the Ivishak reservoir, and the Polar Star, which is a heavy icebreaker but is 41 years old and nearing the end of its operational life. A third icebreaker, the Polar Sea, sister ship to the Polar Star, is laid up in port and has become a source of spare parts for the Polar Star.

According to several reports, Russia has more than 40 icebreakers. According to several reports, Russia has more than 40 icebreakers.
Saudis resume shipments through Red Sea

Saud Arabia says it will resume oil shipments through the Bab al-Mandeb strait after they were temporarily halted following attacks by Yemen’s Shiite rebels. Energy Minister Khalid al-Falih is quoted by the official Saudi Press Agency as saying shipments through the narrow strait, which links the Gulf of Aden to the Red Sea, would resume Aug. 4. He says the Saudi-led coalition, which has been at war with the rebels since March 2015, took the “necessary measures” to ensure the security of the shipments, without elaborating.

Mexican president-elect to end fracking

Mexico’s president-elect said July 31 that he will end fracking, the oil and gas extraction method that has just began to take root in areas of the country’s north. Asked about the potential risks of fracking at a news conference, Andres Manuel Lopez Obrador said, “We will no longer use that method to extract petroleum.” Mexico has a huge potential shale forma-

But while a few wells have been drilled, the Mexican government has only recently scheduled bidding on opening some blocks for commercial development through frack-

Lopez Obrador also railed against private electricity generation contracts that displaced the government-owned Federal Electricity Commission, known as the CFE. He said that trend would be “corrected,” without saying whether he would seek to overturn existing contracts.

“The neoliberal governments deliberately closed the CFE plants in order to buy electricity from foreign companies at very high prices,” Lopez Obrador said. “All of that will be corrected.”

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EXPLORATION & PRODUCTION

NM, TX oil boom sparks electricity demand

ASSOCIATED PRESS

Electricity demand on Xcel Energy’s grid is reaching all-time records thanks to the oil and gas boom in south-eastern New Mexico and West Texas.

Xcel Energy New Mexico and Texas president David Hudson says oil and gas production in the Permian Basin is driving accelerated load growth on the grid, The Albuquerque Journal reports.

The regional transmission network delivered 6.15 gigawatts of electricity to customers on July 19. That’s about 350 megawatts more than the company had predicted in peak demand on any given day for this year, and the highest amount ever managed by the network.

Hudson told the Journal that a heat wave in July contributed to the surge, but the Minneapolis-based company is seeing extreme strength in load growth in New Mexico’s Eddy and Lea counties.

“We’re now projecting to connect at least another 286 megawatts of load growth this year to the system, and that wasn’t even in our forecast for this year,” Hudson said.

Most of the growth is coming from the Delaware Basin, an oval shaped shale rock formation that protrudes from south-west Texas northward into Eddy and Lea counties. Modern drilling technologies have turned that zone into one of the most-productive oil and gas plays in the world. That’s particularly true in Eddy County, where companies are also setting up new large-scale gas-processing facilities.

Xcel is investing heavily in new infrastructure to meet demand. In late July it inaugurated an 86-mile (138-kilo-

EXPLORATION & PRODUCTION

National rig count down by 4 to 1,044

The number of rigs drilling for oil and natural gas in the U.S. decreased by four this week ending Aug. 3 to 1,044. At this time a year ago there were 954 active rigs.

Houston oilfield services company Baker Hughes reported that 859 rigs target-
ed oil this week (down two from the previous week) and 183 targeted gas (down three). Two were listed as miscellaneous (up one).

Among major oil- and gas-producing states, Wyoming gained two rigs and Louisiana and Pennsylvania each increased by one.

West Virginia lost three rigs, Colorado and New Mexico each decreased by two and Alaska and North Dakota each lost one.

Arkansas, California, Kansas, Ohio, Oklahoma, Texas and Utah were unchanged.

The U.S. rig count peaked at 4,530 in 1981. It bottomed out in May 2016 at 404.
continued from page 1

WELL VIOLATIONS

the Matanuska-Susitna Borough and told Petroleum News at that time that it had “found gas throughout the section” and was “sufficiently encouraged to set casing.” The well was suspended in 2006, and although the company had said it planned to do production testing, by 2007 there was a change of leadership at the company and Storm Cat turned its focus elsewhere.

In a May 8 letter to Trust Resource Manager Mike Franger, AOGCC Chair Hollis French said Storm Cat Energy Corp., the former leaseholder, declared bankruptcy, leaving the Trust responsible for plugging and abandoning the well.

In a June 27 letter French noted that the Trust had extended the lease term in 2009, but that the lease expired in 2013. Wells must be plugged and abandoned prior to termination of the lease on which they are drilled.

Citing the agency’s regulations, French said: “The AOGCC clearly has authority to order a landowner to plug and abandon a well on the landowner’s land.”

The well has not been properly plugged and abandoned, French said, and because the Trust “is currently both the landowner and the owner — the entity with the right to drill into, and appropriate the oil and gas produced from the lease — it is responsible for plugging and abandonment of Northern Dancer.”

In an Aug. 2 letter requesting a hearing, Franger said the Trust wishes to discuss the current condition of the well; potential value of the resource to the Trust; leasing activity for the tract; and obligations of the state to the Trust.

Correspondence around the issue in the commission’s files indicates that the Trust is hoping to find a new operator for the Northern Dancer well.

continued from page 1

SHRIVELING UPSTREAM

petition from U.S. shale gas.

Whalen said the results are “not sustainable from a business continuity and competitiveness perspective. It is also a compounding symptom of the sector’s lack of attractiveness for investment.”

Jennifer Rowland, an analyst with Edward Jones, said “transportation bottlenecks are by far the biggest challenge for Canadian producers, mainly because pipeline constraints won’t be alleviated until the end of 2019 at the earliest.”

Tired of waiting for a turnaround in Canada’s regulatory sector, Canadian-based companies are slashing their spending plans while U.S.-based upstream firms are leaving Canada for good.

The retreat by international producers — notably Royal Dutch Shell, ConocoPhillips, Statoil and Total — saw the total value of assets by foreigners hit a decade low of 7.4 percent in 2017 to C$162.2 billion.

In the meantime, companies such as Statoil and Total — seeing the total value of assets by foreigners hit a decade low of 7.4 percent in 2017 to C$162.2 billion.

And that sale of assets doesn’t account for tens of billions of dollars of potential LNG projects linked to Asian markets that were scuttled because of low commodity prices and domestic regulatory uncertainty.

Acquisitions of Canadian oil and gas assets by foreigners hit a decade low of C$1.43 billion last year, compared to an annual average of C$12.5 billion over the previous decade, according to data collect-

ed by the Financial Post.

Canadian-based companies have also been shifting their direct investment beyond their home territory, with Statistics Canada, a federal government agency, estimating that shift rose from C$60 billion in 2013 to C$100 billion in 2017.

Canada used to be a “jurisdiction where people would dial down risk,” said Rafi Tahanazian, portfolio manager at Toronto-based Canoe Financial. “Now these investors dial up risk when coming to Canada.”

The mood of caution was reflected by Steve Williams, chief executive officer of Suncor Energy, the largest integrated oil company in Canada.

He said that even though his company is more profitable, it has no intention of rushing to sanction new projects.

Congress OKs more legacy well funding

On Aug. 1 the U.S. Senate passed a four-bill appropriations package that, among many provisions, includes funding of $9.5 million to continue the work by the Bureau of Land Management to remediate disused legacy wells in the National Petroleum Reserve-Alaska. With the House of Representatives having already passed the legislation, the legislation now goes to the president for his signature.

In a multi-year program, BLM has been working through the remediation of an inventory of wells drilled by the U.S. Navy and the U.S. Geological Survey between 1944 and 1982 but not properly plugged and abandoned. The Alaska Oil and Gas Conservation Commission, with oversight of well safety in Alaska, has for a number of years been pushing for the appropriate remediation of the wells, ensuring that the wells are properly sealed and tidied up.

Apparently the new funding is intended to cover the cost of dealing with the next cluster of wells in the remediation program. The bill also directs BLM to develop a long-term funding plan for completion of the well clean-up within ten years.

“I am incredibly proud that by working together, in a truly bipartisan manner, we have made progress moving through the appropriations process to fund critical programs important to Alaska and the nation,” said U.S. Sen. Lisa Murkowski, R-Alaska, a member of the Senate Appropriations Committee who had managed the legislation on the Senate floor.

PETROLEUM NEWS
WEEK OF AUGUST 12, 2018

GOVERNMENT

State to release Umiat data area

The Alaska Department of Natural Resources, Division of Oil and Gas, said Aug. 8 that it will release, in no less than 30 days, exploration well and seismic data and information.

This data is primarily over National Petroleum Reserve-Alaska land in the Umiat area, with some of the seismic being released including adjacent state lands to the southeast of NPR-A.

Data includes the Malamute Energy Inc. operated Umiat 23H well in section 32, township 1 north, range, 1 west, Umiat Meridian and the Malamute Energy operated Umiat 18 well in section 3, township 1S, range 1W, UM.

Also being made available is the Renaissance 3-D seismic, permitted by PGS Onshore Inc., in township 3S, range 35-37W, UM; township 4S, range 35-39W, UM; and township 5S, range 37-39W, UM.

—PETROLEUM NEWS

ENVIRONMENT & SAFETY

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—ALAN BAILEY
or APICC, also went on the tour and are in the adjacent photo.

“Ignite Inspire Educate” are three words key to bringing Alaska’s resources out of the ground and into the classroom, ARE says on its website.

Founded in 1982 as a 501(c)(3) educational non-profit, ARE is based in Anchorage. With a statewide reach, ARE has developed a custom curriculum, a teacher training course, hands-on activities, youth programs, and an Alaska Resource Kit so that students and teachers have the basic materials, lessons, and information they need for an educated, thoughtful, investigation of Alaska’s resource industries and their contribution to the birth, growth, and modernization of Alaska as a state.

ARE’s website says, “A partnership between the Alaska Department of Education and private industry, we provide STEM-focused education programs that take science principles as they relate to natural resources and make them Alaska-specific.” Its curriculum is a collection of K-8 (adaptable 9-12) science-based lessons on mineral, energy and forestry resources to which the state science standards have been applied. The curriculum is distributed and taught through its course, kit and other programs.

Robust air cargo growth at Anchorage airport

TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT recently reported strong air cargo growth for the first half of 2018. Air cargo tonnage is up 5.2 percent, to more than 1.34 million metric tons, for January thru June.

“Anchorage Airport’s strategic location gives air cargo operators the ability to fly fully-loaded aircraft between Asia, the United States, Europe, and Latin America,” said Jim Scezeznak, airport manager, in a press release that came from the Alaska Department of Transportation and Public Facilities.

“You can fly a fully loaded freighter to Hong Kong, Shanghai, Tokyo, Seoul, Taipei, Chicago, New York, Los Angeles, Miami, Mexico City, Amsterdam and Frankfurt from Anchorage.”

Special air cargo transfer rights contribute to the strength of the air cargo network. Airlines are allowed to transfer cargo between aircraft just like passengers making a connection at a hub airport.

“We are seeing air cargo customers utilize these special transfer rights to increase the efficiency of their networks and that gives them the ability to open new markets. We are also seeing a lot of growth and interest in using ANC as a connection point between Asia and Latin.”

The growth in air cargo traffic is being replicated in the passenger market.

Anchorage is the world’s fifth busiest air cargo airport and the major gateway for trans-Pacific air cargo. More than 150 wide-body freighter aircraft come through per day.

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The Alaska Department of Transportation and Public Facilities oversees 239 airports, 10 ferries serving 35 communities, more than 5,600 miles of highway and 731 public facilities throughout the state of Alaska.

The mission of the department: Keep Alaska Moving through service and infrastructure.

Thompson gets prestigious lifetime achievement award

AVES THOMPSON, EXECUTIVE DIRECTOR of the Alaska Trucking Association, and a long-time supporter of the World Trade Center in Anchorage, has received a Lifetime Achievement Award at the National Conference on Weights and Measures. Since 1905, the conference’s primary function has been to develop national standards for weights and measures. Prior to it doing so, there was no uniformity among the various states, counties and cities for testing and approving weighing and measuring devices used in commerce.

Prior to joining Alaska Trucking Association, Thompson was chief and director of the state of Alaska Division of Measurement Standards in Anchorage. The award recognizes his 19 years of service to the national conference in several leadership roles.

He was chairman of the 3,500 member conference in 1998-99 during a time of dramatic change. He helped usher the national conference into the 21st century through business model changes and outsourcing.

Thompson also represented the national conference at the Asia Pacific Legal Metrology Forum in Jakarta, Indonesia and the International Organization of Legal Metrology in Paris.

He has been head of the Alaska Trucking Association since 2006.

To learn more about Alaska Trucking Association visit its website: www.aktrucks.org.
continued from page 1

WILLLOW SCOPING

meetings and listening to the comments people make," BLM says.

BLM says that 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 for field access and in-field transportation; an airstrip; and a system of pipelines. Gravel for the project would come from a gravel mine in the Beaufort Sea. BLM intends to facilitate the delivery of modules for the project, BLM says.

Stand-alone facilities

Of particular note in the master development plan is the proposal to construct a stand-alone processing facility, a proposal linked to an increase to ConocoPhillips’ originally published estimate for the scale of the field. ConocoPhillips now says that Willow holds an estimated 400-750 million barrels of recoverable oil equivalent, with peak production rates of perhaps 100,000 barrels per day. The development will likely cost $2 billion to $3 billion over four to five years after a final investment decision is made, with first oil flowing from the field by 2024 to 2025. A further $2 billion to $3 billion would then be spent on cumulative drilling over multiple years to sustain production, ConocoPhillips has said.

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 plans to develop, east of the Saadde River. 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 plans to develop, east of the Saadde River.

The most troubling assessment of the most important thing is to demonstrate to Canadians and to our prospective new owner that this project can be executed in a manner that serves the interests of everybody," he said.

New regulatory hurdle

Anderson also acknowledged that a new regulatory hurdle has surfaced that could make the change of ownership subject to U.S. approval because the purchase includes a spur line delivering Canadian crude to Puget Sound refineries in Washington state.

If that leads to a U.S. national security review it raises the possibility that President Donald Trump could veto the deal.

Closing the transaction requires clearance from the Committee on Foreign Investments in the United States, CFUIS, an inter-agency committee chaired by Treasury Secretary Steven Mnuchin. A spokesman for Canadian Finance Minister Bill Morneau said the Canadian government and Kinder Morgan have already made a joint voluntary filing to CFUIS.

Daniel Ujijio, an international trade lawyer, said the CFUIS review “is not a big deal on HEM, as long as there is no foreign ownership... being considered outside of Canada,” though he said the transaction could be used as a counterweight to attempts to renegotiate the North American Free Trade Agreement “start going bad.”

The slowdown in construction work within the EIS will be a proposal to construct a temporary island in the Beaufort Sea. Also to be considered for the project would come from a gravel airstrip; and a system of pipelines. Gravel access and in-field transportation; an airstrip; and a system of pipelines. Gravel access and in-field transportation; an airstrip; and a system of pipelines. Gravel access and in-field transportation; an airstrip; and a system of pipelines. Gravel access and in-field transportation; an airstrip; and a system of pipelines.

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the Point Thomson unit Central Production Facility to a connection with the Badami Pipeline. PTE is owned 68 percent by ExxonMobil Pipeline Co. and 32 percent by BP Transportation (Alaska) Inc. The pipeline submitted the proposed initial rate of $20.39 per barrel in September of 2015; the state protested in October and ConocoPhillips protested in November.

The original tariff filings put the cost of the line at some $165.8 million, with projected first-year throughput of some 5,800 barrels per day. In its protest to the original proposed rate the state said the rates were so high because they were based on estimated first-year throughput, while second-year throughput was expected to be some 8,000 bpd.

The line has a capacity of 70,000 bpd with initial Point Thomson production projected to peak at 10,000 bpd. When ConocoPhillips intervened it said that as a part owner at Point Thomson it would be a future shipper. In 2017 ConocoPhillips said it was dropping its working interest ownership in the Point Thomson unit, about 5 percent, "in fact, the producer has experienced operational problems" at Point Thomson, reducing both production and said its share would be relinquished to other working interest owners at the field.

Production averages

Production began in April 2016 and for the nine months of that year averaged 1,706 bpd (based on production data from the Alaska Oil and Gas Conservation Commission), rising to just 4,748 bpd in 2017 and dropping to just over 3,600 bpd for the first six months of 2018 for which data is available from AOGCC.

David Walsh, president of PTE Pipeline LLC, cited the 4,748 bpd figure in prepared testimony presented to RCA as part of the new tariff filing, and said total throughput for 2017 was 1,746,301 barrels.

He said the 2017 throughput is higher than what is expected for the foreseeable future, citing a 3,608 bpd average for the first six months of 2018, “due to producer operational problems at Point Thomson, reducing both production from the unit and throughput on the pipeline.

“The producer has experienced operational issues and has been unable to maintain consistent production since the pipeline went into service in April 2016,” Walsh said. “Throughput dropped below 100 barrels per day on June 11, 2018, and has averaged less than 100 barrels per day since then,” he said, with producer nominations through August only 75 bpd, “and when they will increase is unknown.”

He said that based on those facts, he believes the pipeline’s throughput for the 12 months ending in June 2018, “which equates to an average of approximately 4,500 barrels per day, is a more representative throughput for setting prospective rates than the actual throughput for calendar year 2017.”

Costs

Erik Wetmore, principal in the consulting firm Turner Wetmore Collins LLC, in testimony prepared for PTE as part of its RCA filing, listed elements of total revenue requirement for the line of $344.56 million, including: operating expenses, $4.48 million; DR&R (dismantling, removal and restoration) allowance, $1,015 million; depreciation expense, $5,217 million; amortization of AFUDC (allowance for funds used during construction), $1,252 million; return on rate base, $16.956 million; and income tax allowance, $5.535 million.

Bruce Fairchild, a principal in Financial Concepts and Applications Inc., in discussing his return on equity analysis in testimony filed with RCA for AOGCC, noted the cost of the proposed new tariff rate through Aug. 22.

“Because PTEP is being depreciated over 28.7 years for rate purposes, the uncertainties surrounding the development of the PTU create considerable risk as to the full recovery of the owners’ original investment in PTEP. Additionally, since PTEP was placed in service, the PTU has encountered operational problems with its specialized compressor, which has significantly reduced throughput over PTEP.”

Fairchild said that, in addition to many of the risks faced by the trans-Alaska oil pipeline, the Point Thomson Export Pipeline “is also exposed to additional uncertainties related to the development of the PTU (Point Thomson unit) that were not faced by TAPS. PTEP was constructed for the purpose of transporting condensate in anticipation of the full gas resource at PTU being developed, with the PTU Settlement Agreement outlining several development scenarios of varying scope depending on regulatory, environmental, and environmental factors. Before the full gas resource at PTU can be developed, there must be a way to get the natural gas to market, which does not currently exist,” he said.

He noted the cost of the proposed Alaska LNG Project, an estimated $45-$65 billion, and its scheduled completion date of 2025.

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RCA is taking comments on the proposed new tariff rate through Aug. 22.

—KRISTEN NELSON
Petroleum News

Intriguing geology

The geology of the Six Sisters trend is particularly intriguing and could provide some insights to the petroleum geology of particularly intriguing and could provide

Petroleum News. Blodgett said that, at the time of the drilling, the oil companies did not view the discoveries as viable for the time.

A substantial oil find

The A1 well encountered a similar stratigraphic sequence to that in the Stinson well, although this well did not encounter quartzite at the top of the basement sequence — the quartzite apparently thins out to the west of the Stinson well. However, at the eastern end of the six Sisters trend, did have hydrocarbon shows in the A1 well.

The well found a substantial oil resource in sands of the Canning: A test conducted for the A1 well flowed oil at 2,507 barrels of oil per day, Blodgett told Petroleum News. Blodgett said that, at the time, this had been the highest producing exploration well in the North Slope region, with a flow rate exceeding that of the Prudhoe Bay field discovery well.

“The very economically attractive,” Blodgett said. However, it appears that at the time of the drilling, the oil companies did not view the discoveries as viable for development.

To the west of the A1 and Stinson wells is a line of four other wells that have penetrated similar geology: the Alaska State D1, the Alaska State F1, the Alaska Island No. 1 and the Challenge Island No. 1. Two tests in the F1 well flowed condensate at rates of 152 and 204 barrels per day from the basement rocks. The most westerly of the wells, the Challenge Island well, found some Cretaceous rocks below the Canning and above the basement, including sands equivalent to the reservoir rock in the Point Thomson gas and condensate field to the south.

Intriguing geology

The geology of the Six Sisters trend is particularly intriguing and could provide some insights to the petroleum geology of ANWR to the east, Blodgett and Sutherlin think. The wells lie near the crest of a

The origin of the oil found in the quartzite is enigmatic — it may have come from a widespread North Slope source rock referred to as the HRZ, or from the Canning formation, Blodgett said.

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The appearance of these non-marine rocks under the nearshore waters of the Beaufort Sea raises interesting and as yet unanswered questions regarding the geography of the region at the time the rocks were forming.

One enigma associated with Arctic Alaska geology is the mechanism where-by the Canada Basin, the sector of the Arctic Ocean north of Alaska, formed. One prevailing theory is that the basin formed from the counterclockwise rotation of the northern part of Alaska away from what is now the northern coast of Canada. Blodgett thinks that similarities between the Cambrian geology in eastern Siberia and that found by the Six Sisters wells may be evidence that, in fact, northern Alaska rifted from Siberia, and not from Canada.

Steve Sutherlin is a minority owner of Petroleum News.

Contact: Alan Bailey at abaily@petroleumnews.com

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PETROLEUM NEWS 2 WEEK OF AUGUST 12, 2018

Young minds are the key to Alaska's future.

At Alaska Resource Education, our mission is to educate students and teachers about Alaska's natural resources and how our mineral, timber and oil and gas resources are used everyday. By supporting resource education you are ensuring Alaska's resource industry continues to be a healthy part of our economy and help provide for the next generation. With your help, we can inspire young minds and ignite an interest in Alaska and its resources.

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continued from page 1

SIX SISTERS

Exxon in 1975. The Stinson well was drilled offshore, at the eastern end of the Six Sisters trend, while the A1 well was drilled to the west of the Stinson well, from North Star Island.

The Stinson well tested a flow rate of 430 barrels per day of light oil and condensate from quartzite in the ancient Paleozoic basement at a depth of around 15,000 feet. According to a report by Blodgett and Sutherlin, oil flow from the find could rise to 700 to 800 barrels of oil under clean well hole conditions. Below the quartzite lies a more mixed rock assemblage, including shales and a carbonate rock called dolostone. The well also penetrated and found an oil show in the early Tertiary Canning formation immediately above the basement.

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