



No limit on IBLA's ANWR ruling; Oil Search changeover on track

THE INTERIOR BOARD of Land Appeals has no time limit to issue its appeal decision on a 25-year-old Arctic National Wildlife Refuge border dispute between the U.S. Department of the Interior and the state of Alaska.

"There is no time limit for the Board to issue a decision on land boundary disputes," Rachel Levin, communications lead at Interior's Office of Policy, Management and Budget told Petroleum News in a Jan. 24 email.

"Appeal disposition times vary and depend on multiple

see **INSIDER** page 11



Furie's sale hearing moves again; Alaska counsel hiring approved

Furie Operating Alaska LLC has again rescheduled an omnibus hearing on its Chapter 11 bankruptcy case, to Feb. 11 at 2 p.m. Eastern Time before U.S. Bankruptcy Judge Laurie Selber Silverstein at the U.S. District Court of the District of Delaware.

The hearing includes the sale hearing on the sale of Furie's assets originally scheduled for Nov. 20, under a bidding procedures order signed Sept. 26 by Selber Silverstein. The hearing was moved to Jan. 13, then to Jan. 27, prior to being set for the February date.

As per a Notice of Amended Agenda of Matters Scheduled for hearing on January 27, 2020 at 11:00 am. (eastern time) filed by Furie Operating Alaska LLC, most of the matters to be considered are adjourned to the hearing scheduled for Feb. 11.

see **FURIE HEARING** page 11

New Umiat unit shows promise of deeper oil in northern lease

A unit formed Sept. 1 on the southeastern edge of the National Petroleum Reserve-Alaska not only contains the Umiat oil field, but possibly a deeper oil target in the northern of its two leases.

Discovered by the U.S. Navy in 1946, Umiat was never produced because its reservoir is shallow, partially frozen in permafrost and low pressure; no companies have tried to produce such a reservoir on the North Slope.

The field's distance from infrastructure was also a challenge, but now Umiat sits in a hot location — south of ConocoPhillips big Willow discovery and southwest of Oil Search's even larger Pikka and Horseshoe discoveries.

Because the 12 wells drilled at the prospect between 1945 and

see **UMIAT UNIT** page 11

Reboot for Keystone XL; US reinforces approval of pipeline

The Trump administration has pumped fresh life into its 2017 approval of the Keystone XL pipeline, which holds out hope of delivering an extra 830,000 barrels a day of Alberta oil sands bitumen to U.S. refineries in Texas and Illinois and Gulf Coast terminals.

Interior Secretary David Bernhardt signed an approval for the line to cross the U.S.-Canada border and continue for 46 miles across land in Montana that is controlled by the Bureau of Land Management and the U.S. Army Corps of Engineers.

Despite endless wrangling and court battles with state governments along the right of way, environmentalists, landowners and Indian tribes, Keystone XL has been supported by President Donald Trump, who issued a federal permit for the

see **KEYSTONE XL** page 10

EXPLORATION & PRODUCTION

Plenty of oil remains

USGS estimates 3.6 billion barrels undiscovered in central North Slope

By **ALAN BAILEY**

For Petroleum News

The U.S. Geological Survey has published a new assessment of undiscovered, technically recoverable oil and gas resources under the central North Slope of Alaska. The agency estimates mean resources of 3.6 billion barrels of oil and 8.9 trillion cubic feet of natural gas in the region. The region is bounded on the west by the National Petroleum Reserve-Alaska and on the east by the Arctic National Wildlife Refuge. It runs south from the nearshore state waters of the Beaufort Sea to the northern border of the Gates of the Arctic National Park.

The assessment does not include potential fur-

An examination of the trends in this data reveals, as expected, that some significant oil potential remains in the Ellesmerian and Beaufortian in the north but that, in the south, given the thermal maturity distribution, the oil potential appears very low.

ther oil and gas discoveries in the Torok and Nanushuk formations of the central North Slope that have been the focus of recent major oil finds — these exploration plays were fully considered in

see **OIL ESTIMATE** page 12

EXPLORATION & PRODUCTION

Exploration is underway

Earliest North Slope well spud by Oil Search; ConocoPhillips drilling most wells

By **KAY CASHMAN**

Petroleum News

The winter exploration season to find missed oil in Alaska's North Slope is off to a good start, with ice road construction beginning in late November and Oil Search Alaska spudding the first well on Dec. 25 in the Mitquq prospect west of the central North Slope, where most of the drilling is taking place.

Four companies are drilling wells — 12 main bores plus sidetracks (permitted as separate wells).

The most active explorer, ConocoPhillips Alaska, expects to complete up to seven main bores; Eni US Operating two; Oil Search two; and 88 Energy subsidiary Accumulate Energy Alaska is drilling one main well.

The latest division North Slope activity map said first oil from Nikaitchuq North is expected in mid-2022, with full development starting in early 2024.

88 Energy targets March 1

As of Jan. 28, Accumulate's 34-mile ice road was approximately 70% complete with a planned Charlie 1 spud date of "on or before March 1," Erik Opstad, Anchorage-based general manager of operations for the company, told Petroleum News Jan. 28.

The Charlie 1 program is being financed by a joint venture between 88 Energy and Premier Oil

see **EXPLORATION SEASON** page 8

PIPELINES & DOWNSTREAM

Donlin gasline ROW OK

DNR approves state ROW lease to pipe Cook Inlet gas to Donlin Gold Project

By **STEVE SUTHERLIN**

Petroleum News

The Alaska Department of Natural Resources issued a final commissioner's decision Jan. 22 in favor of offering a right of way over state lands to Donlin Gold LLC for a natural gas pipeline from Beluga on Cook Inlet to the company's proposed mine in the Yukon Kuskokwim region of Western Alaska.

The proposed mine site lies 10 miles north of Crooked Creek village on surface land leased from Calista Corp. and Kuskokwim Corp. Calista owns the subsurface land and mineral rights in the proposed mine area.

The ROW decision, signed by Commissioner

The U.S. Army Corp of Engineers, lead agency of the NEPA process, authorized Donlin's preferred route based on the final environmental impact statement.

Corri Feige, proposes to offer the lease over 207 miles of state lands for 30 years, the maximum period allowed by law.

Feige found that Donlin is "fit, willing and able to properly construct, operate, maintain and terminate the Donlin Pipeline."

The decision follows a series of public notices,

see **DONLIN GASLINE** page 8

● EXPLORATION & PRODUCTION

Dunleavy bill updates geothermal statutes

Proposal switches from permits to licenses, extends time to work geothermal prospects, almost doubles acreage individual can hold

By KRISTEN NELSON
Petroleum News

Alaska Gov. Mike Dunleavy has introduced a bill to revise statutes related to the state's geothermal resources.

Senate Bill 161 was introduced Jan. 22 and assigned to Senate Resources.

In his transmittal letter, dated Jan. 21, Dunleavy said the "bill removes obstacles for exploration and development of Alaska's geothermal resources" and would reclassify "the current permit system as a license system similar to that for oil and gas exploration." The oil and gas exploration license program makes areas available for licensing on a competitive basis and requires a work commitment, expressed in dollars. Upon completion of the work



GOV. MIKE DUNLEAVY

commitment, a license area — or a portion thereof — could be converted into oil and gas leases. The governor also said the bill "more clearly defines what constitutes geothermal resources available for lease."

The bill would increase time available for exploration to 5 years from the current 2 years (with a potential 1 year extension) and nearly doubles maximum geothermal acreage a person may hold from 51,200 acres to 100,000 acres, "to account for the tendency of geothermal resources to be dispersed over large areas." The larger acreage is expected to attract more interest because "developers will have a greater opportunity to explore the appropriate area to delineate geothermal systems."

Current system

Geothermal resources, like oil and gas, fall under the Department of Natural Resources' Division of Oil and Gas. Existing geothermal regulations allow issuance of permits for exploration, development or use of geothermal resources.

Under the proposed legislation the division would issue licenses, similar to those for oil and gas exploration, requiring, as do licenses in oil and gas, work commitments and also having the potential for licenses to be converted to leases once work commitments are complete.

Currently the division may issue prospecting permits or leases for exploration and development of geothermal resources, with disposal of land for geothermal exploration requiring that those lands be "designated as proposed geothermal disposal area and a best interest finding is issued authorizing the disposal."

The division has issued best interest findings for the Mount Spurr area and for Augustine Island and held competitive geothermal lease sales in those areas, for Mount Spurr in 2008 and Augustine Island in 2013.

Geothermal exploration

There has been prior leasing for geothermal exploration in the Cook Inlet area in Southcentral Alaska with

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Petroleum News

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Final EIS for FERC permit scheduled for March, final FERC decision for June; Fluor contracted in fall to work on new cost estimate



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Alaska Rig Report

Rig Owner/Rig Type Rig No. Rig Location/Activity Operator or Status

Alaska Rig Status

North Slope - Onshore

Doyon Drilling			
Dreco 1250 UE	14 (SCR/TD)	Milne Point, M-34	Hilcorp
Dreco 1000 UE	16 (SCR/TD)	Standby	
Dreco D2000 Uebd	19 (SCR/TD)	Standby	
AC Mobile	25	Alpine, CD5-96	ConocoPhillips
OIME 2000	141 (SCR/TD)	Alpine, CD4-499	ConocoPhillips
	142 (SCR/TD)	Kuparuk 3R-107	ConocoPhillips
TSM 700	Arctic Fox #1	NPRA, Stirrup 1	Oil Search

Hilcorp Alaska LLC	Rig No.1	Milne Point	Hilcorp Alaska LLC
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Kuukpik Drilling	5	Deadhorse	Available
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Nabors Alaska Drilling			
AC Coil Hybrid	CDR-2 (CTD)	Deadhorse, L-119A	BP
AC Coil	CDR-3 (CTD)	Kuparuk, 1E-20	ConocoPhillips
Dreco 1000 UE	7-ES (SCR-TD)	Kuparuk, Mitquq 1	Oil Search
Mid-Continental U36A	3-S	Stacked	Available
Oilwell 700 E	4-ES (SCR)	Stacked	Available
Dreco 1000 UE	9-ES (SCR/TD)	Stacked	ConocoPhillips
Oilwell 2000 Hercules	14-E (SCR)	Deadhorse	Available
Oilwell 2000 Hercules	16-E (SCR/TD)	Stacked	Brooks Range Petroleum
Oilwell 2000 Canrig 1050E	27-E (SCR-TD)	Stacked	Glacier Oil & Gas
Oilwell 2000	33-E	Deadhorse	Available
Academy AC Electric CANRIG	99AC (AC-TD)	Stacked	Repsol
OIME 2000	245-E (SCR-ACTD)	12 Acre Pad, stacked	ENI
Academy AC electric CANRIG	105AC (AC-TD)	Stacked	Oil Search
Academy AC electric Heli-Rig	106AC (AC-TD)	Stacked	Great Bear Petroleum

Nordic Calista Services			
Superior 700 UE	1 (SCR/CTD)	Deadhorse	Available
Superior 700 UE	2 (SCR/CTD)	Deadhorse, stacked	Available
Ideco 900	3 (SCR/TD)	Charlie #1	Accumulate Energy Alaska
Rig Master 1500AC	4 (AC/TD)	Oliktok Point	ENI

Parker Drilling Arctic Operating LLC			
NOV ADS-10SD	272	Prudhoe Bay, J-31	BP
NOV ADS-10SD	273	Stacked in Deadhorse	Available

North Slope - Offshore

BP			
Top Drive, supersized	Liberty rig	Inactive	BP

Doyon Drilling			
Sky top Brewster NE-12	15 (SCR/TD)	Spy Island, S106-NE1	ENI

Nabors Alaska Drilling			
OIME 1000	19AC (AC-TD)	Oooguruk Stacked	Caelus Energy LLC

Cook Inlet Basin – Onshore

BlueCrest Alaska Operating LLC			
Land Rig	BlueCrest Rig #1	Stacked	BlueCrest Alaska Operating LLC

Glacier Oil & Gas	Rig 37	West McArthur River Unit Workover	Glacier Oil & Gas
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All American Oilfield LLC			
IDECO H-37	AAO 111	Stacked in the Peak yard	Available

Hilcorp Alaska LLC			
TSM-850	147	Stacked	Hilcorp Alaska LLC
TSM-850	169	Stacked	Hilcorp Alaska LLC

Cook Inlet Basin – Offshore

Hilcorp Alaska LLC			
National 110	C (TD)	Platform C, Stacked	Hilcorp Alaska LLC
	Rig 51	Steelhead Platform, Stacked	Hilcorp Alaska LLC
	Rig 56	Monopod A-13, stacked	Hilcorp Alaska LLC

Nordic Calista Services			
Land Rig	36 (TD)	Kenai, stacked	Available

Spartan Drilling			
Baker Marine ILC-Skidoff, jack-up		Spartan 151, stacked at Rig Tenders where pre mobilization work is being performed	Hilcorp Alaska LLC

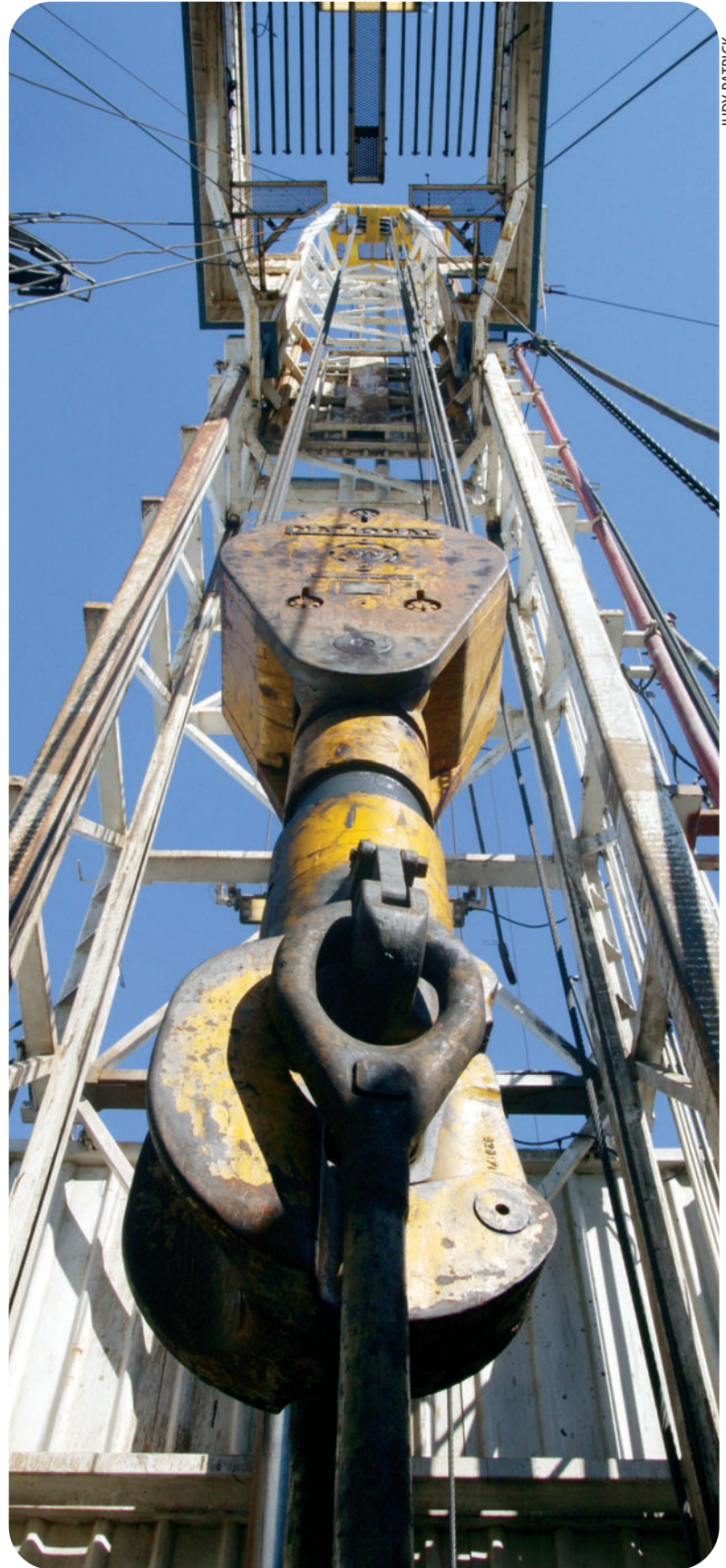
Furie Operating Alaska			
Randolf Yost jack-up		Nikiski, OSK dock	Available

Glacier Oil & Gas			
National 1320	35	Osprey Platform, activated	Glacier Oil & Gas

The Alaska Rig Report as of Jan. 29, 2020.
Active drilling companies only listed.

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

This rig report was prepared by Marti Reeve



JUDY PATRICK

Baker Hughes North America rotary rig counts*

	Jan. 24	Jan. 17	Year Ago
United States	794	796	1,059
Canada	244	244	232
Gulf of Mexico	21	20	20

Highest/Lowest

US/Highest	4530	December 1981
US/Lowest	404	May 2016

*Issued by Baker Hughes since 1944

The Alaska Rig Report
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• NATURAL GAS

AGDC focused on FERC, cost reduction

Final EIS for FERC permit scheduled for March, final FERC decision for June; Fluor contracted in fall to work on new cost estimate

By KRISTEN NELSON

Petroleum News

Joe Dubler, interim president of the Alaska Gasline Development Corp., updated House Resources Jan. 22 on the Alaska LNG Project.

Dubler returned to AGDC as interim president in January 2019 after board membership changes under the Dunleavy administration resulted in the ouster of Keith Meyer as president.

AGDC then returned to a stage-gate process for the Alaska Liquefied Natural Gas Project, AKLNG, and focused activities on obtaining authorization to construct from the Federal Energy Regulatory Commission. AGDC also focused on reviewing costs and updating the economic analysis and on soliciting private sector firms to build, own and operate the project.

Dubler told the committee that when pre-FEED, front-end engineering and design, was completed in 2016, the economics were not attractive. The producers stepped back and the state, through AGDC, continued working the project.

He said when he came back it was with the promise to look at project economics and complete the FERC regulatory process.

If economics have improved enough for the project to move forward, AGDC would be looking for third parties to invest, loan money, build and operate the project — really three megaprojects: the gas treatment plant on the North Slope, the pipeline and the liquefaction facility at Nikiski.

It's not something the state is going to take on. The governor is adamant on that, Dubler said.

As for AGDC's role should the project go forward, Dubler said AGDC would not be the project sponsor, but would represent the state's interest in the project.

Future FERC milestones for the project include publication of availability of the final environmental impact statement March 6 and issuance of a final FERC

order June 4.

The joint venture agreement pre-FEED cost estimate from 2015 was \$10.7 billion for the gas treatment plant on the North Slope, \$13.9 billion for the pipeline and \$19.6 billion for the LNG production facility at Nikiski, some \$44 billion. (The JVA included BP, ConocoPhillips, ExxonMobil and the state, represented by AGDC.)

Asked about the original cost estimate, Frank Richards, AGDC senior vice president, program management, talked about some of the industry changes since the original estimate. He said the 2019 review of costs reflects the increasing use of modularization in large project construction, allowing a significant decrease in costs by constructing elsewhere and putting facilities together on site.

The gas treatment plant was always a modular design, Richards said, because that is how North Slope construction is done.

But the LNG facility was originally designed with less modularization — more modularization there, in line with current industry practice, would reduce costs.

He also said the project management team assembled by ExxonMobil for the JVA was "quite top heavy" so there was discussion around ways to reduce that cost.

Dubler said AGDC personnel met with senior engineers and project management professionals from BP and ExxonMobil last spring. It was a workshop to review original cost estimates and he said the feeling was that with changes in the industry costs could be reduced significantly from the original estimate.

Fluor is working on a cost update to the fourth quarter of 2019, Dubler said, with 10 major tasks, including modularization and sourcing of supplies. AGDC contracted with Fluor in the fall to evaluate the cost reduction opportunities and update the Class 4 cost estimates to fourth quarter 2019 dollars. The updated Class 4 cost estimate would be provided as input into a common economic model developed with input from BP, ExxonMobil, the Department of Revenue and an investment bank.

Dubler said Fluor will be looking at all cost elements with AGDC expecting a big component of reductions to come from the contingency, because when hard costs go down, contingency goes down as well. ●



JOE DUBLER

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GEOHERMAL STATUTES

Ormat Technologies taking 15 geothermal leases in 2008 on the flanks of Mount Spurr and evaluating the leases with aerial surveys and gravity and electromagnetic measurements, followed by the drilling of two core holes in 2010 to depths of 1,000 feet and a 4,000-foot well in 2011. According to a presentation to the Alaska Senate Resources Committee the 4,000-foot well encountered rock that does not hold heat particularly effectively, did not encounter hot water and found subsurface temperatures no higher than 140 degrees Fahrenheit.

Ormat had planned further field work, but in 2015 the company discontinued its Mount Spurr venture, writing off the \$7.3 million it had invested.

Current interest

Last March DNR's Division of Oil and Gas called for applications for geothermal exploration near Mount Spurr, proposing to allow exploration on 12 tracts covering 28,800 acres about 40 miles west of the village of Tyonek.

When the division posted updated activity maps in mid-January the Cook Inlet map said the division was reviewing an application from Salt Lake City-based Raser Power Systems for a geothermal prospecting permit on three Mount Spurr tracts. The division said the application was in response to a Feb. 20, 2019, call for applications involving 12 tracts on acreage east of Lake Chakachamna, northwest of Trading Bay and 40 miles west of Tyonek. ●

Contact Kristen Nelson
at knelson@petroleumnews.com

● GOVERNMENT

AOGCC hears 2nd reconsideration request

Attorney for Alaskan Crude raises constitutional, statutory issues; commission asks for plans for wells, all dating from 1980s

By KRISTEN NELSON
Petroleum News

The Alaska Oil and Gas Conservation Commission heard another bond amount reconsideration request Jan. 23, this one from attorney Jim Gottstein, representing James White, president of Alaskan Crude Corp.

The commission's new bonding requirements went into effect May 18, replacing bonding requirements of \$100,000 for a single well and \$200,000 for blanket coverage of all an operator's wells in the state.

A number of companies requested reconsideration. This is the second hearing the commission has held.

The first was on a request from Malamute Energy (see story in Jan. 26 issue of Petroleum News). In that request Malamute focused on duplication of bonding — its two suspended wells are on National Petroleum Reserve-Alaska leases managed by the Bureau of Land Management, which has recently raised its own bonding requirement for the two wells from \$200,000 to \$1.25 million.

Alaskan Crude has three wells, Burglin 33-1, Mike Pelch 1 and Katalla KS-01, all three drilled in the mid-1980s.

Burglin 33-1 is a 9,458-foot vertical hole on the North Slope. AOGCC records show it as a suspended exploration well.

The Katalla KS-01, a 1,834-foot vertical hole, is onshore in the Gulf of Alaska basin; AOGCC records show it was drilled as a development well, currently shut-in.

Mike Pelch 1 is a Cook Inlet basin exploratory well, shown in commission records as a gas well with a single completion. It is a 10,731-foot vertical hole.

The company has a \$200,000 bond and under the new requirements, \$400,000 per well for one to 10 wells, the company's total bonding requirement would be \$1.2 million, \$200,000 of that covered by its existing bond.

Legal issues

In July the commission sent letters to operators notifying them of additional

The company has a \$200,000 bond and under the new requirements, \$400,000 per well for one to 10 wells, the company's total bonding requirement would be \$1.2 million, \$200,000 of that covered by its existing bond.

bonding amounts.

In a July letter to the commission Gottstein said the commission was requiring \$500,000 per year over two years to bring Alaskan Crude's bonding up to the new \$1.2 million.

Gottstein argued in the July letter that the increase in bonding was illegal under the Alaska Constitution and also said the commission's new regulations went beyond the scope of its authorizing statute.

On the constitutional issue, Gottstein

said in his July 25 letter to the commission: "It is simply not legal to increase the bonding/security requirements for existing permit holders."

Citing Alaska statutes, Gottstein said July 25 that "the new regulations go beyond the scope of the authorizing statute." AS 31.05.030, he said, provides that AOGCC may require "the furnishing of a reasonable bond with sufficient surety conditions for the performance of the duty to plug each dry or abandoned well or the repair of wells causing waste."

The commission's new regulations, he said, "go far beyond that allowed in the statute, requiring, 'security to ensure that each well is drilled, operated, maintained, repaired, and abandoned and each location is cleared in accordance with this chapter.'"

Jan. 23 hearing

In the Jan. 23 hearing, and in a Jan. 22

letter, Gottstein made the same arguments, telling the commission that ex post facto application of an increase in bonding for "existing permit holders" is illegal under Article 1, section 15 of the Alaska Constitution.

On the regulations themselves, he said: "The Alaska Supreme Court has long and repeatedly held that a regulation which exceeds its statutory authority is void."

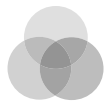
"The Legislature only authorized the Commission to require a bond to secure ... 'the duty to plug each dry or abandoned well or the repair of wells causing waste,'" Gottstein said, citing AS 31.05.030(d).

He said the new regulation "clearly exceeds the Commission's authority and makes the regulation invalid."

Commission Chair Jeremy Price asked Gottstein, in reference to his AS 31.05.030(d) cite, what Gottstein thought

see **BOND REQUEST** page 6

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GOVERNMENT

Alberta poised to go 'ballistic' over sands

Feds promise decision by end of February on Teck's oil sands mine; Kenney says delays, denial will prove there is 'no way forward'

By GARY PARK

For Petroleum News

The years of snarling and feuding over building new crude bitumen pipelines out of Alberta could seem like just the preliminary rounds when the Canadian government casts a decision on Teck Corp's plans for the largest oil sands mine in Alberta history.

Whatever the verdict of Prime Minister Justin Trudeau's cabinet on Teck's C\$20.6 billion Frontier project targeting output of 260,000 barrels per day, there is bound to be a heavyweight showdown.

The buildup is already taking shape as proponents and opponents of Frontier engaged in clashes in December in Edmonton and Calgary, amid a forest of placards and verbal threats, ending any hopes for a reasoned debate and consensus deals.

A Financial Post columnist Diane Francis described Frontier as a "litmus test" of whether Trudeau will govern on behalf of Canadians, or wants to "continue govern-



JUSTIN TRUDEAU



JASON KENNEY

ment-by-Greta" — a reference to the Swedish teenager Greta Thunberg who has become the "poster girl for the global environmental movement."

Alberta Premier Jason Kenney said that if Frontier does not proceed "it would be a clear indication that there is no way forward for (Canada's) largest natural resource."

He carefully avoided painting a picture of the likely outcome or getting drawn into discussing whether defeat for Frontier would fuel the separatist mood in Alberta and Saskatchewan.

Less hesitant is Jack Mintz, a fellow at the University of Calgary's School of Public Policy, who warned that a Trudeau administration move to delay or cancel Frontier would be a "real stab in (Alberta's) heart" which would see the province "going ballistic."

He said the project is an "interesting test" of whether the federal government believes in its oft-proclaimed policy of encouraging responsible resource development.

Issue for cabinet ministers

There are signs that the looming decision is driving some of Trudeau's senior cabinet ministers — notably Deputy Prime Minister Chrystia Freeland — underground.

A frequent visitor to Alberta, where she was born and raised, Freeland was back in early January to visit with relatives and talk with the mayors of Edmonton and Calgary and Kenney.

She then scurried back to Ottawa after avoiding reporters' questions — a rare display of camera-shyness for her.

There was no sign that Freeland was ready to answer a plea from Alberta Senator Doug Black to Trudeau to bring his entire cabinet to Alberta for a meeting and to visit Grande Prairie, the major oil industry service city of 70,000 in northwestern Alberta.

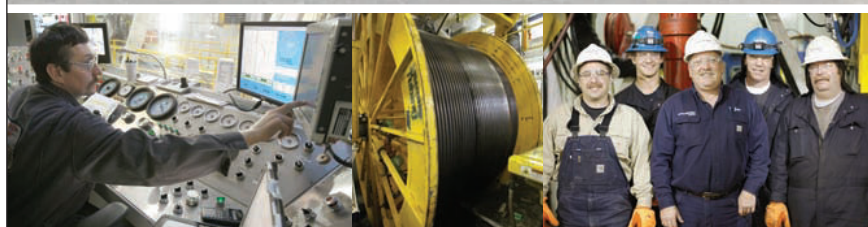
Black said ministers would benefit from meeting with "real people and to see first-hand the devastation their policies have caused. I've recently visited Grande Prairie and the hardship there is just unbelievable."

There seems little point in Teck or Alberta trying to

see SANDS DECISION page 8



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BOND REQUEST

was the meaning of subsection c of that section ("(c) The commission shall adopt regulations and orders and take other appropriate action to carry out the purposes of this chapter").

Gottstein said the commission can adopt regulations but is limited to bonding wells for plugging and abandonment.

Commissioner Jessie Chmielowski asked Gottstein if he had any information on the three wells and noted that the lease has been terminated on the Burglin well location, which requires plugging and abandonment.

Chmielowski asked for information on future plans for all three wells, including P&A plans for the Burglin well and said the record for the hearing would be left open for four weeks to allow for receipt of that information. ●

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● ENVIRONMENT & SAFETY

Cook Inlet Beluga numbers continue down

NOAA Fisheries releases report on biennial survey done in 2018; median estimate is 279 whales; next survey will be this summer

By KRISTEN NELSON
Petroleum News

NOAA Fisheries has released its latest estimate of the Beluga whale population in Cook Inlet with numbers down from the last count and continuing a 10-year decline.

A Jan. 28 release said scientists have estimated the population size to be between 250 and 317, with a median estimate of 279.

“The population is estimated to be smaller and declining more quickly than previously thought,” the agency said.

Cook Inlet belugas were listed by NOAA as endangered under the Endangered Species Act in 2008 and the agency finalized a recovery plan in December 2016.

Year-to-year estimates can vary, the agency said, based on factors such as births and deaths, changes in behavior or distribution and statistical variability in the data.

But over the most recent 10-year period, 2008-18, the estimated trend in abundance is a drop of about 2.3% per year, a decline faster than the previous estimate of 0.5% per year.

The last population estimate, released in 2016, used the best methodology at the time, the agency said, and estimated some 328 animals. “Today, using the new, more reliable methodology, scientists estimate that abundance in 2016 was more likely around 293 animals,” the agency said. The new methodology for data collected in 2018 shows that the Cook Inlet beluga population appears to be continuing to decline and is now estimated to be around 279 animals.

“These new abundance and trend numbers are concerning,” said Jim Balsiger, Alaska regional administrator for NOAA Fisheries. “They indicate that we still have a long way to go to recover this iconic and highly endangered population.”

Surveys since 1993

The National Marine Fisheries Service began aerial surveys to estimate beluga numbers in Cook Inlet in 1993 and surveyed annually until 2012; biennial surveys began in 2014.

NOAA Fisheries provided background in its report on the 2018 surveys, dated December 2019 and released in January. The next survey is scheduled for June of this year.

The agency said belugas inhabit the



Cook Inlet belugas were listed by NOAA as endangered under the Endangered Species Act in 2008 and the agency finalized a recovery plan in December 2016.

waters surrounding Alaska from Yakutat Bay to the Alaska-Yukon Territory boundary, with five recognized stocks: Cook Inlet, Bristol Bay, Eastern Bering Sea, Eastern Chukchi Sea and Beaufort Sea.

Cook Inlet belugas are the most isolated stock, separated from the other stocks by the Alaska Peninsula. Cook Inlet belugas gather in river mouths and bays during the summer.

“The small population size ... and geographic and genetic isolation of the whales in Cook Inlet ... in combination with their strong site fidelity, has made this stock vulnerable to anthropogenic impacts,” NMFS said.

Until 1999 the whales were subject to an unregulated Native subsistence hunt, but after the stock was designated depleted under the U.S. Marine Mammal Protection Act in 2000, the hunt became regulated based on a 5-year harvest level based on the average abundance during the previous 5 years and population growth rate during the previous 10 years. “A harvest is not allowed if the previous 5-year average abundance is less than 350 beluga whales which has been the case since the first review period (2003-2007), and the harvest has been zero since 2005,” NMFS said.

In 2008 the Cook Inlet beluga population was designated a distinct population segment and listed as endangered under the U.S. Endangered Species Act.

June 2018 survey

NMFS said the 2018 aerial survey provided thorough coverage of the coast of

Cook Inlet belugas are the most isolated stock, separated from the other stocks by the Alaska Peninsula.

al sightings were in lower Cook Inlet, south of East Foreland and West Foreland. From 1996-2011, hardly any were seen in the lower inlet during the surveys.

Sightings south of North Foreland and Point Possession, which had averaged 1.5% of sightings from 1993-95, were zero until June 2012. In June 2012 and June 2018 a group of belugas was repeatedly found in Trading Bay.

Other than those sightings, belugas were only consistently found in waters north of North Foreland and Moose Point. There was also a steep decline in June sightings in Knik Arm and Turnagain Arm after 2007.

In addition to aerial surveys, NMFS said limited satellite tagging provides more detail over longer periods, with satellite results from tagged whales from 1999 to 2003 showing the distribution seen in aerial surveys in June is typical of most of summer through late fall, with whales remaining in waters north of East and West Foreland.

In winter some tagged whales dispersed into deeper waters and a few were as far south as Chinitna Bay, but never left Cook Inlet. ●

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DONLIN GASLINE

hearings, community outreach and comment periods which began in 2014.

In addition to review of the pipeline application, the state participated as a cooperating agency in the National Environmental Policy Act process which resulted in modifications of the preferred route to minimize overlap and impacts to the Iditarod trail and Dalzell Gorge.

The U.S. Army Corp of Engineers, lead agency of the NEPA process, authorized Donlin's preferred route based on the final environmental impact statement.

The Donlin Gold mine would require an average load of 157 megawatts, requiring a 14-inch gas pipeline to generate that level of power, Donlin Gold said.

Donlin Gold said it considered coal, hydroelectricity, a power-line intertie, biofuel and even nuclear energy during the feasibility analysis but those options "did not meet the current needs of the project."

Were natural gas not an option, the most likely power source would be diesel shipped by barge from Bethel.

"If the pipeline is included in development, approximately two barges per day would take small amounts of diesel fuel and camp supplies from Bethel to a port site approximately eight miles downriver from Crooked Creek," the company said. "The diesel and supplies would then be transported on a 30-mile access road to the mine site."

The total length of the proposed gas pipeline is 312 miles.

Public notice period comments spur no substantial changes

DNR said it received 85 written comments and that 18

people spoke in person at public hearings during the proposed decision public notice period. In addition, clarification comments were received from state agencies, such as the State Historic Preservation Office.

None of the comments resulted in changes to the published Analysis and Proposed Decision, and no substantial changes were made to the published Draft Right of Way Lease.

DNR received comments requesting that the pipeline be relocated north of the Alaska Range in low lying black spruce forests over concerns for wildlife habitat, slow growing vegetation, heavy snowfall and avalanche risk, subsistence and traditional uses, headwater streams, and effects on permafrost.

DNR said the route along the face of the Alaska Range is fairly direct from its exit near Farewell westward to the mine site, adding that the soils on the North Face of the Alaska Range have fewer wetlands and less permafrost than the lowlands in the black spruce forest.

The pipeline will be buried along most of its length in the area.

Buried pipelines don't prevent animal migration, grazing or calving post construction, DNR said.

Restoration and re-vegetation of disturbed areas and stabilization, rehabilitation and reclamation will be required following construction.

DNR also received comments of support, including those for new job opportunities in the area, burial of the line to minimize impacts to land users, excess capacity in the line to facilitate gas supply to other users in the area, a well designed pipeline, and Donlin's community outreach during exploration and project development.

Noting that a mine site is energy intensive, comments praised the use of natural gas, rather than diesel as a fuel due to cleaner power generation.

Mine holds bright financial prospects for the Calista Region

Donlin Gold is co-owned by NOVAGOLD Resources and Barrick Gold Corp.

The Donlin Gold Project is proposed as an open-pit gold mine which would process approximately 59,000 short tons of ore per day for an estimated 27 years, with approximately 39 million ounces of gold in the measured and indicated resource categories, inclusive of proven and probable reserves, Donlin Gold said.

Infrastructure plans also include a power-generation plant, water-treatment plant, access roads, housing, two ports, and an airstrip, with a mine construction timeline of three to four years.

Donlin Gold believes the proposed mine could produce an average of 1.1 million ounces of gold annually during operation, making Donlin Gold one of the world's largest gold mines.

According to Calista Corp., mining has historically had a significant effect on economic and social well-being in the Calista Region.

The Goodnews Bay platinum mine and the Red Devil mercury mine at their peak provided hundreds of jobs, Calista said, adding, "Placer gold production continues on a small scale and is an important source of revenue for Calista."

If the Donlin Gold Project goes to development, year-round employment will be available to shareholders and residents, Calista said.

"In addition to providing local jobs and economic growth, the project will also benefit all Alaska Native Corporation shareholders through ANCSA 7(i) and 7(j) resource revenue," Calista said. ●

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EXPLORATION SEASON

Plc, with Premier paying \$23 million of the costs.

In Accumulate's Icewine project, Charlie 1 is on state oil and gas lease ADL 393380 approximately 29 miles west of the Franklin Bluffs pad, which is at Milepost 377.7 on the Dalton Highway.

According to Accumulate's lease plan of operations with Alaska's Division of Oil and Gas, in addition to the ice road, two 500 feet by 500 feet ice pads, one drill pad and one staging pad (a mile west of the Dalton Highway at MP 386) will be built.

Using Nordic Rig 3, Charlie No. 1 will be drilled to an approximate depth of 11,000 feet and may include laterals, sidetracks or additional penetrations.

The well will intersect seven stacked prospects, four of which are interpreted as oil bearing in nearby Malguk No.1 (drilled in 1991 by BP) and are therefore considered appraisal targets, 88 Energy said.

In paperwork submitted to the division, the primary drilling objective is the Seabee formation.

According to 88 Energy releases, the total gross mean

prospective resource across the seven stacked targets to be intersected by Charlie 1 is 1.6 billion barrels of oil, with 480 million barrels net to 88 Energy.

ConocoPhillips about to spud 2 wells

The first ConocoPhillips exploration well to be drilled this winter is Tinmiaq 20, expected to spud "today, but cold weather is hampering operations," company spokeswoman Natalie Lowman said Jan. 29.

Drilling at the Harpoon prospect will begin in mid to late February, she said.

And although ConocoPhillips does not consider it to be part of its exploration program, the Fiord West Rhea 1 well west of the Alpine field involves an ice pad and road and will likely be the second winter season well spud. Per Lowman, drilling is "planned to start Feb. 2 (weather dependent) and could be completed in mid-February. This well will be drilled by Doyon 25," she said Jan. 29.

The rigs the company has talked about using for exploration drilling are Doyon 141 and 142.

ConocoPhillips is planning to drill and test up to seven exploration wells this winter on its Willow (and West Willow) and Harpoon acreage in the National Petroleum Reserve-Alaska, although it is permitting 10 sites.

The U.S. Bureau of Land Management said in its environmental assessment that vertical seismic profiles will be done at some of the new wells.

The company's existing suspended wells — Scout 1, Tinmiaq 2 and 15 — are part of the program to conduct inspection and potential abandonment.

The 10 wells, all on ConocoPhillips-operated leases, are as follows: Tinmiaq 14, Tinmiaq 18, Tinmiaq 19, Tinmiaq 20, Tinmiaq 22, Tinmiaq 24, Harpoon 1, 2, 3 and 4.

The Tinmiaq 14, 18, 20, 22, 24 ice pads will be 600 by 600 feet, as will all the Harpoon pads.

The Tinmiaq 2 ice pad will be 500 by 500 feet.

The Tinmiaq and Harpoon base camp ice pads will be 1,000 by 1,000 feet, as will be the Remote Ice Camp pad, or RIC, plus there will be several other ice pads.

The ice airstrip will be 4,000 by 75 feet.

Scott Jepsen, a ConocoPhillips Alaska senior vice president, recently said there will be 74 miles of ice roads for exploration (Harpoon), with 165 miles total in this winter's program. He also said four of the wells would be in the Willow area (Tinmiaq wells).

Jepsen described the Harpoon program southwest of

see **EXPLORATION SEASON** page 10

EXPLORATION & PRODUCTION

US drilling rig count drops by 2 to 794

Baker Hughes reports the number of rigs drilling for oil and natural gas in the U.S. dropped by two to 794 the week ending Jan. 24, down from 796 the previous week and down by 265 from 1,059 a year ago.

In its weekly rig count the Houston oilfield services company said 676 rigs targeted oil (up three from the previous week; down 186 from a year ago) and 115 targeted natural gas (down five from the previous week; down 82 from a year ago). There were three miscellaneous rigs active (unchanged from the previous week and up by three from a year ago).

The company said 47 of the holes were directional, 710 were horizontal and 37 were vertical.

New Mexico was up four rigs from the previous week; Ohio was up by one.

Rig counts were unchanged from the previous week in Alaska, California, Colorado, Louisiana, North Dakota, Oklahoma, Pennsylvania and Utah.

West Virginia was down by one rig from the previous week and Wyoming was down by two rigs.

Texas, the state with the most active rigs at 397, was down four from the previous week.

Baker Hughes shows Alaska with 10 rigs active for the week ending Jan. 24, down one from a year ago.

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

—KRISTEN NELSON

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SANDS DECISION

defend their estimates that carbon dioxide output from Frontier of 4.1 million metric tons a year is well within the province's limit of emissions from major resource projects of 100 million metric tons a year, or that the project will create 7,000 construction jobs and full-time employment for 2,500.

Indigenous communities

Also ignored is the fact that 14 Indigenous communities have used their own democratic process to sign benefits and access agreements with Teck.

Ron Quintal, president of the Fort McKay Metis Nation, finds it "frustrating" that other aboriginal groups outside the Frontier region want the project rejected.

He said the pro-Frontier communities have hired independent researchers and have gone over all resource projects with a fine tooth comb.

"If we're looking for true reconciliation

and protection of our rights and asking the government to honor that, then we need to also honor each other from that perspective," Quintal said.

Bill Loutitt, chief executive officer of McMurray Metis, said his community believes it is better off trying to make changes and improve the environmental conditions for the project "on the inside to mitigate any factors that are going to really be damaging."

A spokeswoman for federal Environment and Climate Change Minister Jonathan Wilkinson said the government's deadline for making a final decision on Frontier is the end of February.

"The government will consider a range of factors when they make a decision, including our commitments to achieve net-zero emissions by 2050, to advancing reconciliation, to creating good-paying middle-class jobs and to growing the economy," she said. ●

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• GOVERNMENT

Administration issues new WOTUS definition

By KRISTEN NELSON
Petroleum News

WOTUS, waters of the United States, has a new definition, replacing one from the Obama administration with one from the Trump administration.

The definition issue dates from enactment of the Clean Water Act in the 1970s, with contention over the scope of federal authority under the act and tension between expanding the definition to provide more protection and landowner and developer rights.

The WOTUS definition was expanded under the Obama administration in 2015, drawing objections from, among others, Alaska's congressional delegation.

The Trump administration sees its definition as providing certainty.

In a Jan. 23 announcement, EPA Administrator Andrew Wheeler said: "EPA and the Army are providing much needed regulatory certainty and predictability for American farmers, landowners and business to support the economy and accelerate critical infrastructure projects."

"Having farmed American land myself for decades, I have personally experienced the confusion regarding implementation of the scope of the Clean Water Act," said

R.D. James, assistant secretary of the Army for Civil Works. "Our rule takes a common-sense approach to implementation to eliminate that confusion. The rule also eliminates federal overreach and strikes the proper balance between federal protection of our Nation's waters and state autonomy over their aquatic resources."

The court was divided

In a Dec. 8 story Petroleum News reported on an overview of the WOTUS situation provided by Duncan Greene, a partner in Van Ness Feldman LLP, to the Resource Development Council's annual conference Nov. 20.

In 2006 the Supreme Court issued a split decision on WOTUS, Greene said, with one test for defining WOTUS relatively narrow and the other more expansive, including water with a significant nexus to clearly jurisdictional waters.

The 2015 rule promulgated under the Obama administration was more expansive; the 2018 rule proposed by the Trump administration was more restrictive.

Alaska's senators have fought for a more restrictive rule and both responded Jan. 23 to the new definition.

"I have worked for years to try to prevent federal agencies from massively expanding the definition of the

'Waters of the United States,' and I appreciate this administration's efforts to return to a more reasonable regulation that does not block private construction or harm economic growth," U.S. Sen. Lisa Murkowski, R-Alaska, said in a Jan. 23 statement. "Many states, including my home state of Alaska, already have robust standards that work in tandem with federal requirements to protect water quality," she said.

"I join hard-working Alaskans and land owners across the country in welcoming the Trump administration's final, clear WOTUS Rule, which stands in stark contrast to the burdensome and overreaching definition offered by the previous administration," said U.S. Sen. Dan Sullivan, R-Alaska.

"Under the previous rule, land owners faced the potential for thousands of dollars in litigation and months of bureaucratic back-and-forth just to fill a ditch on their own property, or build a structure."

Greene told the RDC conference that Alaska is particularly impacted by the 2015 definition because of all of the waterbodies in the state.

Because of pending litigation on the rules, Greene said it's his guess "we probably won't really know where all of this is going to end up until the Supreme Court gets another crack at defining WOTUS." •



Oil Patch Bits

Fugro awarded contract for KrisEnergy's Apsara field

Fugro said Jan. 28 that it has been awarded a geotechnical contract for Apsara oil field in block A, offshore Cambodia, as part of the nation's first hydrocarbon development. The Apsara field lies over the Khmer Basin, an unproduced geological basin in Cambodian maritime waters in the Gulf of Thailand.

Fugro will carry out a geotechnical investigation to support the design and installation phases of the Apsara mini phase 1A development. The work will be performed using their dedicated drill ship, the Fugro Mariner, and will comprise shallow gas pilot-hole drilling, and geotechnical sample boreholes and cone penetration tests.

"It is a pleasure to return to Cambodia, where our involvement in the block A exploration goes back to 2006, when we supported the drilling of the initial exploration wells," said Jerry Paisley, Fugro's business line director, Asia Pacific Region. "KrisEnergy has been

our valued client since their establishment in 2009 and part of our success is owed to our unique 'Triple A' approach, where we acquire, analyze and advise on Geo-data across the full project life cycle".

Vladimir Lavie, Senior Geophysicist for KrisEnergy, commented: "We thank our colleagues at Fugro for working with us on this historic project. This site investigation will be yet another milestone in the 2020 realization of the Apsara oil field. We've already completed our geophysical surveys, and Fugro's geotechnical investigation will provide the final set of geomechanical information needed to derisk the design, installation and operation of our project."



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KEYSTONE XL

project in 2017 after work was halted by the Obama administration in 2015, but there is a constant unease in the Alberta government and among oil sands producers over what might happen if Trump fails to get re-elected.

Casey Hammond, assistant secretary of the Interior Department, said Interior officials and other federal agencies have conducted a thorough review of Keystone XL's potential impact on the environment.

He said TC Energy provided detailed plans to deal with any spill from the line, adding "we're comfortable with that analysis that's been done."

TC Energy expects to start work in April

Keystone XL operator TC Energy (formerly Trans Canada) said earlier in January it expects to start work in April

on the short cross-border section as part of its plans to spend US\$8 billion over the next two years.

The company said in a filing with the U.S. District Court of Montana it also wants to commence building pumping stations along the entire route from Alberta to refineries in Texas in June, then shift its attention to pipeline segments in Montana and South Dakota in August.

To underpin those goals, TC Energy said it plans to start mobilizing heavy construction equipment in February for 10 worker camps in Montana, South Dakota and Nebraska along with moving sections of pipe by trains and trucks to storage yards.

Alberta Premier Jason Kenney welcomed TC Energy's announcement as "very encouraging news ... we need to get this pipeline built" to relieve transportation bottlenecks out of Alberta.

Alberta Energy Minister Sonya Savage said the latest round of political instability in the Middle East has high-

lighted Canada's role as a dependable oil producing country.

She said construction of Keystone XL would create thousands of jobs in Canada and the U.S.

Environmentalists to appeal to court

An attorney for environmental groups said they will attempt to overturn Trump's permit and will ask a judge in the case to issue an order blocking the latest approval.

Steve Volker, who represents the Indigenous Environmental Network, said Trump's permit was "unconstitutional" and his clients have "very confidence" the federal courts will set aside the approvals.

U.S. Rep. Greg Gianforte of Montana praised the administration for its commitment to "get this critical infrastructure project moving after years of unnecessary delays."

The Nebraska Supreme Court removed the last major barriers to Keystone XL proceeding in the state in

August when it ruled in favor of state regulators who approved the pipeline route in 2017. Opponents had argued that the regulators did not abide by all the procedures required by state law.

The project also continues to get tripped up by unexpected events, including a rupture on the existing Keystone pipeline in North Dakota late last year that leaked 1.5 million liters of crude oil in North Dakota following leaks in South Dakota in 2016 and 2017.

That dragged Alberta crude prices down to about US\$34 a barrel compared with around US\$56 for West Texas Intermediate.

Commissioned 10 years ago to ship 590,000 bpd of Alberta heavy crude to refineries in Illinois and Texas, the original Keystone pipeline accounts for 18% of Canada's total oil exports to the U.S.

—GARY PARK

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continued from page 8

EXPLORATION SEASON

Willow as "rank exploration."

State and federal geologists have said the geological targets in the Willow area are Nanushuk and Torok.

See the ConocoPhillips map on page 7 of the Dec. 15 issue of Petroleum News, which can be viewed in the print or pdf versions.

Drilling continues at Nikaitchuq North

Eni's exploration drilling this winter in frozen ice conditions is a continuing program in the Nikaitchuq North offshore federal unit, although the wells are drilled

from state land; specifically, the Spy Island drill site, or SID, which is a Nikaitchuq unit production pad built next to Spy Island within the barrier islands in state submerged lands.

Plans for drilling two wells plus a sidetrack in the unit, NN-01 and NN-02, can be found in both state Division of Oil and Gas records, under the adjacent Eni-operated Nikaitchuq unit plan of development and a permit application, as well as in the U.S. Bureau of Ocean Energy Management's Nikaitchuq North plan of exploration.

The division's website said a rig modification for Doyon 15 rig was initiated in second quarter 2017 to prepare for a December exploration well. NN-01 was spud on Dec. 25 and drilled to a measured

depth of 30,010 feet in Harrison Bay Block 6423 (shy of its 35,000-foot target). The well was suspended in August 2018. The drilling operation was resumed on Jan. 19, 2019, and suspended on April 17.

A land use permit approved by the division in 2017 for the project said it would include two S-shaped wells into the targeted reservoir and logging. Depending on well log results, a bypass to core was planned for each well. Contingent upon logging results and core data, a sidetrack to a 1,000-foot horizontal section was planned to be drilled approximately six months later to perform a production test on either one or both wells.

The division said Eni plans to resume well operations for NN-01 in the current winter drilling season to reach target depth by third quarter.

In an April 13, 2018, exploration plan revision BOEM authorized Eni to continue well operations during the summer of 2018, while drilling above the hydrocarbon zone in well NN-01, and to enter hydrocarbon bearing formations only from July 15 to Sept. 15, 2018. It also reduced the number of wells to two main bores and one sidetrack.

The revised exploration plan said there will be two potential phases — main bore (slant section) to reservoir target (with option to flow test) and/or a horizontal sidetrack to execute a flow test. Both wells will intersect the main target reservoir up to two times in cascaded contingent sidetrack operations with increasing complexity and appraisal goals.

"After the main bore is drilled, in case of oil discovery and based on the reservoir properties, the possibility to perform a flow test in the initial wellbore or, alternatively, in a lateral sidetrack, is foreseen," Eni said.

The second main bore drilling permit was issued by the Alaska Oil and Gas Conservation Commission on Jan. 17.

In its 12th POD (Oct. 1 through Sept. 30, 2020) Eni confirmed it plans to resume NN-01 well operations in the 2019-20 winter drilling season and expects to reach target depth by third quarter 2020.

The company also plans to do surface facility upgrades in anticipation of spudding NN-02 in first quarter 2020.

Facility upgrades are planned to support the second well and the two remaining SID injection wells, including a new six-slot well containment shelter and associated well conductors, plus the requisite well ties.

Eni has not identified the drilling target at Nikaitchuq North. The Schrader Bluff formation that hosts the reservoir for the

Nikaitchuq unit is known to extend a long way north.

However, there are other possibilities based on circumstantial evidence such as planned drilling depth. One contender is the Jurassic Alpine sands, equivalent to reservoir sands in the Alpine oil field and deeper than the Schrader Bluff.

Also, Kerr-McGee, the previous Nikaitchuq operator, had talked about the possibility of testing the Jurassic Nuiqsut sandstone to the north of the unit.

The latest division North Slope activity map said first oil from Nikaitchuq North is expected in mid-2022, with full development starting in early 2024.

Oil Search spuds second well

Oil Search spud its first exploitation well, Mitquq 1, on Dec. 25 and its second main bore, Stirrup 1, on Jan. 27. Gravel laying to support the building of gravel roads and well pads for the Pikka development project and ice road and pad construction began in late November.

Already the company has said that Mitquq 1, which was drilled by Nabors 7ES rig, intersected 197 feet of hydrocarbon pay comprised of 17 feet of net gas pay and 180 feet of oil pay. No water-oil contact was encountered with the Nanushuk interval.

The 6,885-foot well, which is about six miles from the proposed Pikka Nanushuk development A pad, or ND-A, is separate from Pikka's Nanushuk reservoir.

Oil Search set and tested casing to begin drilling ahead to the Alpine C reservoir, Mitquq 1's secondary objective.

"Next steps focus on data capture before plugging and abandoning the well," Oil Search's manager of U.S. media and communications Amy Burnett said Jan. 30. "Plans call for launching the sidetrack in early March."

Testing to determine well deliverability is expected to take place in late March or early April, the company said Jan. 28.

Previously Oil Search referred to the Mitquq prospect as a "high value tieback" to "future Pikka infrastructure."

Success at the Stirrup prospect, which is close to the Horseshoe Block southwest of the Pikka unit, "could de-risk additional fairways to underpin a possible stand-alone" Horseshoe development, the company has said, noting Stirrup was a direct analogue to the Horseshoe 1 Nanushuk discovery.

If time allows, Oil Search said Stirrup 1 will also be flow-tested this winter. ●

Contact Kay Cashman at publisher@petroleumnews.com

DNR Office of Project Management and Permitting, Executive Director

The Department of Natural Resources is recruiting for an Exempt, non-bargaining unit Executive Director to lead the Department of Natural Resources Office of Project Management and Permitting. We are seeking an energetic natural resources executive to lead a dynamic team of project coordinators managing permit timelines for priority oil and gas, mining, transportation and renewable energy projects. Experience in large projects management, resource extraction, state and federal regulatory systems preferred.

The Office of Project Management and Permitting (OPMP) supports private industries, regulatory agencies, and the Alaska public by implementing a multi-agency permit coordination program to ensure consistent, defensible, transparent, and timely permit decisions for complex natural resource development projects. This model is unique to Alaska and offers a level of assurance to the public and companies investing in Alaska that permit reviews are robust and responsive. OPMP plays a key role in protecting state interests by coordinating multi-agency reviews of proposed federal actions, land management plans, and proposed regulations and policies.

Duties include:

- Work with agency to identify and implement program goals and objectives.
- Provide leadership and management oversight for the efficient and effective delivery of OPMP services.
- Responsible for the effective presentation and monitoring of the division's budget's progress through the legislative process.
- Ensure projects receive timely, coordinated review, permitting, and monitoring for development, transportation, and other specialized projects.
- Monitor federal actions, facilitates federal/state/local coordination and consultation, directs an efficient and reliable multi-agency review process, and is accountable for developing a unified state position in federal comments.
- Generate revenue and recover state expenditures via signed agreements with project proponents.
- Supervise a team of 10-20 Large Project Managers

Minimum Qualifications

This is an exempt position – see specific job posting for additional information.

Education Requirements:

Bachelor's Degree; Prefer Graduate Degree or Professional certification in project management

Additional Required Information

If you are interested in applying, please send the following documents to dnr.commissioner@alaska.gov by February 7, 2020

1. A resume with complete job history, including the names and current telephone numbers of previous employers;
2. Professionally formatted cover letter – please see cover letter information above and below for more information on the cover letter.
3. A list of three (3) professional references with current contact information, one (1) of which must be from a former or current supervisor; and
4. A writing sample.

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FURIE HEARING

Hearing canceled: Motion to employ special Alaska counsel

Under an order signed Jan. 24 by Selber Silverstein, the court will not hear an application/motion to employ/retain Stoel Rives LLP as special Alaska counsel to the debtors, filed by Furie.

The application was granted by Selber Silverstein, noting that “proper and adequate notice of the Application has been given and that no other or further notice is necessary; and it appearing that no party in interest has objected to the Application or the relief requested therein; and the Court having found and determined that the legal and factual bases set forth in the Application establish just cause for the relief granted herein.”

In a declaration of interim manager Scott M. Pinsonnault in support of the application, the debtors proposed to continue to retain Stoel Rives as Alaska counsel because of Stoel Rives’ knowledge about the debtor’s businesses and assets, the firm’s familiarity with the matters that are currently pending, and the Firm’s experience regarding the relevant areas of legal practice:

- Assistance with Local, State and Federal Regulatory and Permitting matters
- Assistance with Alaska Real Property and Oil & Gas Law, including providing Title Opinions and assistance with Gas Sales Agreements
- Assistance with State and Local Tax and royalty matters, including tax appeals

- Assistance with Alaska State and Federal Court Litigation, including the Shelf Litigation
- Local Counsel assistance with Financing matters
- Assistance with Alaska general corporate matters
- Advice regarding Employment Law matters

“The Debtors believe that Stoel Rives is uniquely qualified to represent them in connection with these matters during their Chapter 11 Cases, and Stoel Rives has indicated that it is willing and able to continue to do so, subject to approval by the Bankruptcy Court,” the declaration said.

HEX LLC of Anchorage high bidder on sale assets

HEX LLC, 100% owned by member manager John L. Hendrix of Anchorage, was the successful bidder for the assets, primarily the Cook Inlet Kitchen Lights offshore unit, and related infrastructure such as the Julius R offshore platform, onshore processing facility and all related pipelines.

HEX bid \$15,000,010, according to a Dec. 6 notice filed in the U.S. Bankruptcy Court for the District of Delaware, which noted that the transaction with the successful bidder will be a purchase of equity securities through a plan of reorganization.

Following the auction, the debtors selected Energy Capital Partners Mezzanine Opportunities Fund A LP, debtor-in-possession agent and prepetition term loan administrative agent, as the alternate bidder.

—STEVE SUTHERLIN

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INSIDER

factors, including Board resources,” she said.

A tug of war arose in 1965 over a 19,322-acre sliver between the Canning and Staines rivers which was yanked from state land selections by a U.S. Fish and Wildlife Service remapping that alleged the land should be included in the 19,286,722-acre refuge.

The state has never agreed with USFWS, and it has tried to secure the lands for decades. It made a request for priority conveyance of the acreage in 2014. When Interior refused to transfer the lands, the state filed an appeal with IBLA.

“This appeal is under review,” Levin said. “The Board will issue a decision as expeditiously as we can and will post the decision on our website.”

If the IBLA decides in favor of the state, BLM will administer the land transfer, she said.

The acreage — highly prospective for oil and gas — is a high priority area for the state, Marty Parsons, director of the Alaska Department of Natural Resources’ Division of Mining, Land and Water, told Petroleum News in January 2019.

Parsons said in 2018 that if the agency’s effort to resolve the dispute was not successful, the next step would be federal court.



KEIRAN WULFF



BRUCE DINGEMAN

—STEVE SUTHERLIN

Oil Search leadership transition on track

ACCORDING TO OIL SEARCH Ltd.’s Jan. 28 fourth quarter report, plans for the transition of the managing director role from Peter Botten to Keiran Wulff “are progressing well,” with the formal transfer of responsibilities scheduled for Feb. 25.

Bruce Dingeman is taking Wulff’s place as president of Oil Search Alaska.

Also in the quarterly report was the Australia-based company’s capital management status as of Dec. 31. Oil Search had liquidity of US\$1.15 billion, comprising US\$396.2 million in cash

(US\$547.3 million at the end of the third quarter) and US\$755.7 million in undrawn corporate credit facilities.

During the quarter, the company made net repayments of US\$30 million under its revolving credit facilities and made a scheduled Papua New Guinea project finance principal repayment of US\$179.9 million.

Oil Search ended the period with US\$3.38 billion of debt outstanding, of which US\$2.94 billion related to the PNG LNG project finance facility and US\$440 million to corporate credit facilities, compared to a total of US\$3.59 billion at the end of September.

Regarding capital expenditure, the report said that during fourth quarter, Oil Search spent US\$116.3 million on exploration and evaluation expenditure activities. This “primarily related to pre-FEED activities for the Pikka Unit Development, winter drilling program, seismic acquisition and lease acquisitions in Alaska (US\$61.4 million), as well as the Gobe Footwall exploration well (US\$24.0 million) and pre-FEED activities for LNG expansion (US\$17.5 million) in PNG.”

US\$10.6 million of exploration costs were expensed, mainly seismic acquisition costs and geological, geophysical and general and administration expenses in PNG and Alaska (4th quarter US\$61.4, full year US\$539.8 — includes US\$450 million Alaska acquisition costs on exercising the Armstrong/GMT option, net of US\$70.5 million farm-down proceeds).

—KAY CASHMAN

Utqiagvik sees first sunrise

SUZANNE DOWNING’S Must Read Alaska recently reminded us that Utqiagvik, formerly Barrow and the northernmost community in America, saw its first sunrise since Nov. 18 on Jan. 23 when at 1:09 p.m. the sun skimmed the horizon for about an hour before setting.

The seat of the North Slope Borough, Utqiagvik, population 4,438, gained 37 minutes more daylight on Jan. 24, and by the end of January will have gone from zero to 147 minutes of daylight in just nine days.

Near the 1893 Cape Smythe Whaling and Trading Station in Utqiagvik, the Whale Bone Arch symbolizes the community’s relationship with the ocean and whaling. Its Will Rogers and Wiley Post Monument honors the humorist and the pilot, who died together in a 1935 air crash nearby.

—KAY CASHMAN

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UMIAT UNIT

1952 by the Navy and the two modern wells drilled by former operator Linc Energy in 2013 and 2014, Umiat carries a unique public record of reserve estimates over the 70 years since its discovery.

In 2015, Ryder Scott estimated 2P reserves of nearly 99 million barrels of oil equivalent at the shallow Umiat field — down from 154.6 million in its previous report before oil prices tanked.

In a Jan. 16 letter, Umiat operator Malamute Energy Inc. President Leonard Sojka said the company’s focus since acquiring Umiat in 2016 has been to de-risk technical challenges in the field, “in hopes of attracting an oil industry partner.”

Malamute conducted a multidisciplinary reservoir workshop and extensive tests on Umiat oil and those tests, he said, “confirmed that both the gasoline and the diesel fractions are low in total sulfur and have less than detectable readings for dibenzyl disulfide. That makes the Umiat oil a good candidate for producing ultra low sulfur fuels for sale” to the North Slope market.

Malamute has three technical studies underway with the University of Alaska Anchorage, the first two of which are

complete and the third expected to be finalized soon.

Anadarko Petroleum saw promise in the area in 2002, having conducted two proprietary seismic seasons and three field seasons as part of an assessment of the Brooks Range Foothills petroleum system.

“Seismic line across Umiat show hydrocarbons are reservoired in both the hanging wall and the foot wall of the structures,” Anadarko’s Greg Hebertson said.

“The seal capacity of traps — data from Umiat wells and field work and based on our analysis ... show the seals are there and certainly capable of holding large hydrocarbon columns.” Sojka also said Malamute was looking to find deeper oil at Umiat.

Paul Craig, who won the northernmost lease with partner Peter S. Zamarello in a June 2002 BLM lease sale, said Jan. 29, “when we purchased it our geological thinking was that the oil in the permafrost at Umiat was seepage from an oil field deep and to the north. When looking for an oil field look below and close to an existing oil field — I call it Nearology. Bottom line: we thought that’s where the big oil was; north of Umiat mountain.”

—KAY CASHMAN

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OIL ESTIMATE

the USGS 2017 assessment for the NPR-A. And the assessment only includes conventional resources: It does not consider potential shale oil and gas resources in the region, nor does it consider methane hydrate resources. The USGS published an assessment of North Slope shale oil and gas resources in 2012, and an assessment of hydrate resources in 2019. Also, the assessment does not consider the economic feasibility of recovering the resources.

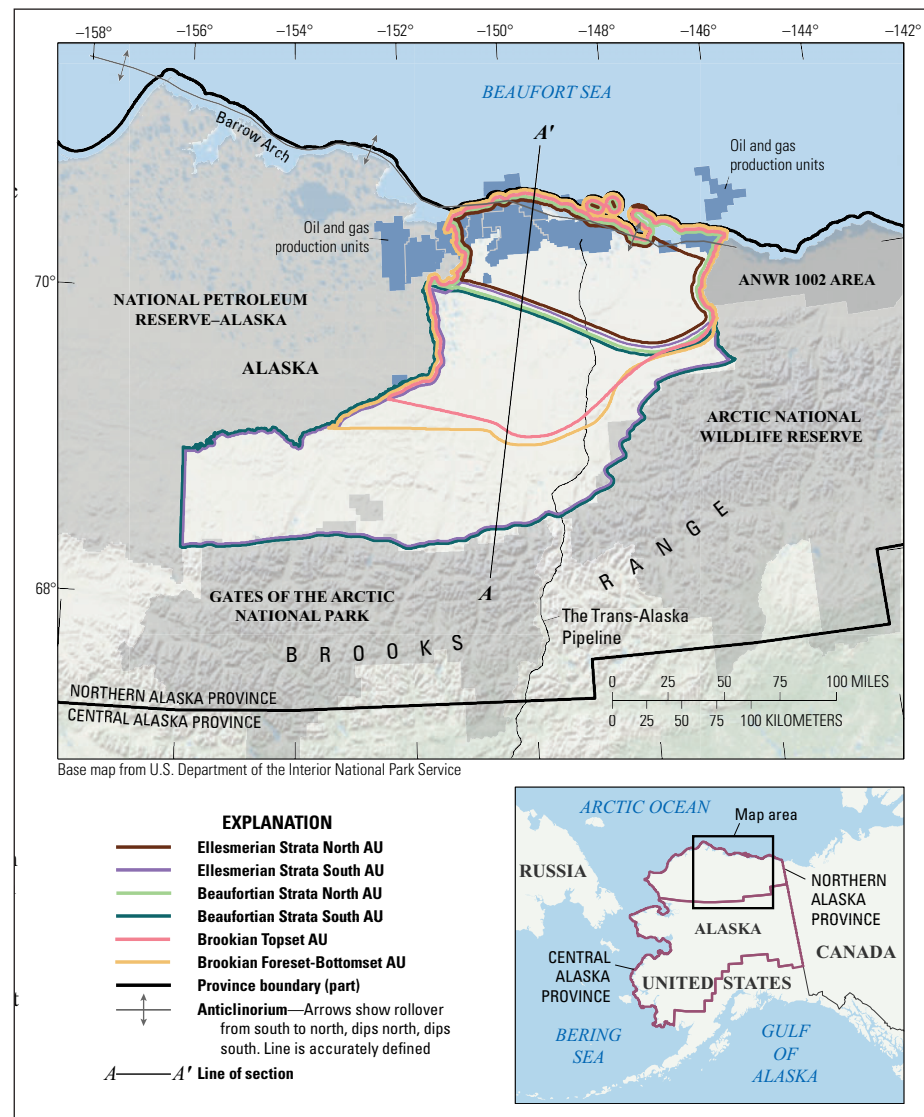
As in any undiscovered oil and gas assessment, there is a significant range of uncertainty in the results. The USGS reports a 95% probability of at least 950 million barrels of undiscovered oil in the region, with a 5% possibility of as much as 8.6 billion barrels. The corresponding range for potential natural gas is 1.6 tcf to 25.4 tcf.

Regional variations

But these regional numbers mask significant differences between different oil and gas plays in different parts of the central North Slope. The USGS has considered plays or “assessment units” within the three major petroleum bearing rock sequences of the region: the Ellesmerian, Beaufortian and Brookian sequences. The older and deeper Ellesmerian and Beaufortian sequences host many of the producing oil fields in the central North Slope. As a consequence, the relatively mature exploration and development of these sequences in the northern part of the region result in a relatively high level of understanding of continuing resource potential. On the other hand, there are huge areas elsewhere, where there has been very little exploration — undiscovered resource potential in these areas remains subject to significant uncertainty.

The Brookian sequence is widely found at relatively shallow depths throughout the region. However, east of the area where current Brookian exploration and development has been focused, the Brookian rocks are younger than the Torok and Nanushuk formations that host recent discoveries. And, east of the trans-Alaska pipeline, there is a huge area of Brookian exploration interest where very little previous exploration has been conducted. The Brookian sequence was formed from the discharge of huge amounts of sediment into an evolving marine basin. To evaluate the Brookian oil and gas potential, the USGS scientists have separately considered Brookian topset formations, rocks formed from sediment deposition at the top of the slope at the edge of the basin, and foreset and bottomset formations, rocks from sediments deposited on the sides and bottom of the basin.

Another very important variable relates



The locations of the six assessment units that the U.S. Geological Survey used for its new oil and gas assessment for the central North Slope. Note that all of the producing oil fields are in the more northerly part of the region.

to the thermal maturity of the oil and gas source rocks in the region, in other words the extent to which the rocks have been heated in the subsurface to produce different types of hydrocarbon. In general, the thermal maturity tends to increase north to south from the Beaufort Sea coast. As a consequence, there is a higher potential for the generation of oil in the more northerly part of the region, with natural gas likely to be more prevalent to the south. This trend is particularly pronounced in the relatively deep Ellesmerian and Beaufortian rocks. For relatively shallow source rocks in the Brookian, however, the oil window extends farther south, into the foothills of the Brooks Range.

Six assessment units

The upshot of all of this is that the USGS has used six assessment units to evaluate oil and gas resources: Ellesmerian targets in the north, Ellesmerian targets in the south; Beaufortian targets in the north; Beaufortian targets in the south; Brookian topsets; and Brookian foreset and bottomset. The relative ranges of estimated undiscovered resources in each of these units

provide an indication of the relative uncertainties of the estimates in the different units. Uncertainty can be expressed as a range of possible resource quantities, from a 95% probability of volumes at the low end of the range, to a 5% probability at the high end.

An examination of the trends in this data reveals, as expected, that some significant oil potential remains in the Ellesmerian and Beaufortian in the north but that, in the south, given the thermal maturity distribution, the oil potential appears very low. On the other hand, while there is gas potential in the north, the gas potential is higher, but also more uncertain in the south.

In the north, the Ellesmerian has a range of 91 million to 869 million barrels of oil, with a mean of 356 million barrels. The corresponding figures for natural gas are 103 billion to 2.0 trillion cubic feet, with a mean of 642 billion. The range for the Beaufortian in the north is 182 million to 1.4 billion barrels of oil, with a mean of 577 million barrels. Natural gas figures have a range of 182 bcf to 2.5 tcf, with a mean of 852 bcf.

In rocks of similar age to the south, nat-

ural gas becomes the expected dominant resource. The Ellesmerian has a range of just 16 million to 216 million barrels of oil, with a mean of 65 million barrel. The range for natural gas is 765 bcf to 6.4 tcf, with a mean of 2.7 tcf. The Beaufortian in the south has a range of zero to 174 million barrels of oil, with a mean of 45 million barrels. Beaufortian natural gas in the south is estimated at a range of zero to 5.7 tcf, with a mean of 1.9 tcf.

Brookian potential

A particular wildcard in the exploration outlook is the Brookian sequence, where the lack of past exploration leads to high levels of uncertainty for future exploration results. However, the assessment indicates that there is strong potential for significant oil and gas discoveries in this sequence.

The Brookian topset has a range of 443 million to 3.5 billion barrels of oil, with a mean of 1.6 billion barrels. Natural gas in this assessment unit has a range of 163 bcf to 3.7 tcf, with a mean of 1.1 tcf. The Brookian foreset-bottomset has oil in the range 239 million barrels to 2.4 billion barrels, with a mean of 975 million barrels. Natural gas estimates for this assessment unit are in the range 423 bcf to 5 tcf, with a mean of 1.6 tcf.

Differences from last assessment

The total mean undiscovered oil volumes have dropped a bit from the 3.9 billion barrels that the USGS determined in its last central North Slope assessment, conducted in 2005. However, the new assessment does not include potential oil in the Nanushuk and Torok formations. And 1 billion barrels of oil have been discovered in the central North Slope since 2005, USGS scientists pointed out in a presentation accompanying the new assessment. The range of uncertainty in the oil estimates has also increased, because of a recognition of the complexity of stratigraphic traps thought likely to hold a significant amount of the oil, the scientists commented. A stratigraphic trap results from the manner in which sediments forming the rocks were deposited, as distinct from structures formed from the subsequent folding and faulting of the strata.

The assessment has also increased the level of uncertainty for potential gas resources, in part because of a lack of delineation of gas discoveries and in part because of the complexities of the structural traps involved. In addition, relatively few wells have been drilled since 2005, with generally modest results for gas discovery, the scientists commented. ●

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