



page 4 Nov. ANS averaged 506,323 bpd, up from October, down 4% from 2019

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Amaroq sues AOGCC on bonding; Mustang Holding files 2020 report

ACCORDING TO COMPANY PRESIDENT Scott Pfoff, on Dec. 9 Amaroq Resources filed an appeal of a bonding order by the Alaska Oil and Gas Conservation Commission in the Superior Court of Alaska, contending that the agency's Nov. 9 decision exceeds AOGCC's authority by infringing on a constitutionally created department of the State of Alaska.

The small independent oil and gas company says by levying the bond, absent fact finding or the other due process protections that are imposed by the Alaska Administrative Procedure Act, the quasi-judicial agency violated rules gov-

see **INSIDER** page 9



Furie asks AOGCC to allow Cook Inlet wells to be P&A'd as they are

When the current owners of the Kitchen Lights unit took over in July, they found a lot of things that needed to be cleaned up in the unit's wells, John Hendrix, chief executive officer and president of Furie Operating Alaska, told the Alaska Oil and Gas Conservation Commission at a Dec. 23 hearing.

One of those things was three exploration wells which, although plugged and cemented, are classified as suspended, he said. Each still has 15 feet of 30-inch conductor pipe sticking up

see **FURIE REQUEST** page 8



JOHN HENDRIX

State of Alaska approves Oil Search's Pikka development plan

On Dec. 22, the Alaska Department of Natural Resources' Division of Oil and Gas notified Oil Search Alaska that it has approved the company's 2021 Pikka unit plan of development.

Pikka, a 77,744-acre unit west of the central North Slope, is expected to begin phase one oil production in 2025, quickly reaching 80,000 barrels a day. Most recently Oil Search increased its Pikka/Horseshoe area recoverable contingent oil reserves by approximately 500,000 barrels to nearly a billion barrels.

During the 2021 POD period Oil Search, whose parent company is based in Australia, plans to continue minor civil work in preparation for development. Additionally, further planning and modeling will be conducted, followed by front-end engineering and design, or FEED, engineering for production and operations

see **PIKKA PLAN** page 11

Critics pounce on report focusing on Indigenous LNG equity stakes

No sooner was a Canadian study released drumming up a case for the benefits of LNG development to Indigenous communities than it was being shredded by environmental organizations opposed to any commercial use of natural gas.

The Conference Board of Canada report, commissioned and funded by the Canadian LNG Alliance, was adamant that LNG exports from British Columbia would raise the standard of living for First Nations.

It said projects would generate "sustainable economic growth ... (and) contribute to the long-term process of reconciliation" between Native people and Canada's non-Indigenous population.

The First Nations LNG Alliance and the First Nations

see **LNG STUDY** page 10

FINANCE & ECONOMY

ANS stays above \$50

Pandemic relief bill inked; Russia favors February OPEC+ supply increase

By **STEVE SUTHERLIN**

Petroleum News

Alaska North Slope crude oil index accomplished a 15-day run of closing prices above \$50 per barrel, even as major oil indexes slipped to begin the short trading week heading into New Year's Day.

ANS crude dropped 44 cents Dec. 28 to close at \$51.46 per barrel, Brent lost 44 cents to close at \$50.86 and West Texas Intermediate closed at \$47.62, down 61 cents.

U.S. equities, however, moved higher Dec. 28 after President Donald Trump signed a \$900 billion pandemic relief bill, a development bullish for oil demand.

Asked if U.S. shale could ever recover to its previously rapid, multi-million barrels per day year-on-year growth, Yergin said, "Let me give you a very simple answer, the answer is no."

The Dow Jones Industrial Average, the S&P 500, and NASDAQ closed Dec. 28 at record highs. Japan's Nikkei index closed at a 30-year high.

The weakening oil prices on Dec. 28 may have occurred due to supply side concerns raised by comments made by Russian Deputy Prime

see **OIL PRICES** page 11

EXPLORATION & PRODUCTION

A Willow injunction?

Groups challenging NPR-A development want work to stop until lawsuit is resolved

By **ALAN BAILEY**

For Petroleum News

On Dec. 23 the Sovereign Inupiat for a Living Arctic and four environmental organizations filed a motion in the federal District Court in Alaska, asking the court to issue a preliminary injunction requiring ConocoPhillips to defer construction work on its Willow oilfield development in the National Petroleum Reserve-Alaska, pending resolution of a court case challenging the legality of the Bureau of Land Management approval of the project.

ConocoPhillips has said that, depending on regulatory approvals, Willow construction could begin in 2021.

Meanwhile, on Dec. 22 the U.S. Court of Appeals for the 9th Circuit issued an order rejecting a petition by environmental groups for an en banc rehearing of an appeal against the legal validity of a 2017 BLM oil and gas lease sale in the NPR-A.

Project approval challenged

As previously reported in Petroleum News, in November the appellees filed their case in District Court, arguing that BLM had violated the National

see **WILLOW INJUNCTION** page 10

FINANCE & ECONOMY

Plodding progress

Oilfield service companies tap into only small share of C\$1.7B fed cleanup funds

By **GARY PARK**

For Petroleum News

Canada's oilfield service sector has been sluggish in taking advantage of the C\$1.7 billion of federal money assigned to clean up abandoned wells, with one exception — Indigenous communities that are eager to secure a slice of the money.

That partly reflects a bureaucratic tangle bogging down the program, which was announced in April and hailed by the Canadian government as a chance to rehire some of the thousands of workers laid off this year amid the COVID-10 downturn.

It is also seen by some as a sign of reluctance among cleanup companies and their employees to spend time at remote work camps, exposing them-

selves to the virus at a time when outbreaks have been declared at six oil sands sites.

Complaints from the beginning

From the outset, complaints have mounted about the program, which is primarily being administered by the Alberta and Saskatchewan governments, which say they have been overwhelmed with applications from the oilfield services sector.

Alberta has assigned more employees to run the program and has made changes to the approval process but has yet to generate enthusiasm in the industry.

see **CLEANUP FUNDS** page 10

AIDEA to bid in ANWR O&G lease sale

By KAY CASHMAN
Petroleum News

The Alaska Industrial Development and Export Authority unanimously voted Dec. 23 in favor of a resolution that allows the state-owned public corporation to bid in the upcoming federal Arctic National Wildlife Refuge coastal plain oil and gas lease sale, currently scheduled for Jan. 6.

Resolution G20-31 notes that one of the purposes of AIDEA is to develop and provide financing for industrial development and facilities that “are essential to the development of the natural resources and the long-term economic growth” of Alaska, directly and indirectly alleviating unemployment in the state.

The resolution gives AIDEA the power to allocate up to \$20 million in the first year to evaluate and submit bids among the 22 tracts identified by Interior’s Bureau of Land



DANA PRUHS

Management for the lease sale.

“The Alaska Legislature established AIDEA back in 1967 to participate in opportunities exactly like this,” AIDEA Chairman Dana Pruhs said in a Dec. 24 press release.

“Our goal is to partner with private industry to ensure that these types of development projects that deliver tangible, economic benefits for all Alaskans move forward,” he said.

“The fact is no one has a better track record for responsibly developing oil and gas resources, especially in the Arctic, than Alaska,” said Gov. Mike Dunleavy in a show of support for AIDEA’s decision.

Opening new areas of the Arctic for responsible oil and gas development is vital for Alaska’s economy and to promote the sustainable utilization of Arctic infrastructure facilities including the Trans-Alaska Pipeline System, the resolution notes.

The tiny 1002 portion of the 19 million-acre refuge is



GOV. MIKE DUNLEAVY

“Our goal is to partner with private industry to ensure that these types of development projects that deliver tangible, economic benefits for all Alaskans move forward.”

—Dana Pruhs

a narrow strip of coastline that was set aside for potential development by Congress because of its hydrocarbon rich geology.

To date, only one well has been drilled in the ANWR 1002 area — the onshore KIC well, drilled in 1985 and 1986 by operator Chevron and partner BP from surface land owned by Kaktovik Inupiat, the Native village corporation for Kaktovik, and into the subsurface oil and gas mineral rights owned by Arctic Slope Regional Corp., the Native regional corporation for northern Alaska. ●

Contact Kay Cashman
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Alaska-Mackenzie Rig Report

| Rig Owner/Rig Type | Rig No. | Rig Location/Activity | Operator or Status |
|--|---|---|---|
| Alaska Rig Status | | | |
| North Slope - Onshore | | | |
| All American Oilfield LLC IDECO H-37 | AAO 111 | Deadhorse | Emerald House LLC (88 Energy subsidiary) |
| Doyon Drilling Dreco 1250 UE Dreco 1000 UE Dreco D2000 Uebd AC Mobile OIME 2000 TSM 700 | 14 (SCR/TD) 16 (SCR/TD) 19 (SCR/TD) 25 141 (SCR/TD) 142 (SCR/TD) Arctic Fox #1 | Milne Point, MPU J-29 Standby Standby Colville River Unit, CD5-90 Standby Standby Standby | Hilcorp Alaska LLC ConocoPhillips |
| Hilcorp Alaska LLC Rotary Drilling | Innovation | Milne Point, I Pad | Hilcorp Alaska LLC |
| Nabors Alaska Drilling AC Coil Hybrid AC Coil | CDR-2 (CTD) CDR-3 (CTD) | Deadhorse, Cold Stacked at Nabors Deadhorse Yard Kuparuk, Cold Stacked at 12 Acre Pad | BP ConocoPhillips |
| Ideco 900 Dreco 1000 UE Mid-Continental U36A Oilwell 700 E Dreco 1000 UE Oilwell 2000 Hercules Oilwell 2000 Hercules Oilwell 2000 Canrig 1050E Oilwell 2000 Academy AC Electric CANRIG OIME 2000 Academy AC electric CANRIG Academy AC electric Heli-Rig | 3 (SCR/TD) 7-ES (SCR-TD) 3-S 4-ES (SCR) 9-ES (SCR/TD) 14-E (SCR) 16-E (SCR/TD) 27-E (SCR-TD) 33-E 99AC (AC-TD) 245-E (SCR-ACTD) 105AC (AC-TD) 106AC (AC-TD) | Deadhorse, Stacked Kuparuk, Cold Stacked Stacked Stacked Stacked Deadhorse Stacked Stacked Deadhorse Stacked 12 Acre Pad, stacked Stacked Stacked | Available Oil Search Available Available ConocoPhillips Available Brooks Range Petroleum Glacier Oil & Gas Available Repsol ENI Oil Search Great Bear Petroleum |
| Nordic Calista Services Superior 700 UE Superior 700 UE Ideco 900 Rig Master 1500AC | 1 (SCR/CTD) 2 (SCR/CTD/TD) 3 (SCR/TD) 4 (AC/TD) | Deadhorse Deadhorse, stacked Talitha A Oliktok Point | Available Available Great Bear Pantheon ENI |
| Parker Drilling Arctic Operating LLC NOV ADS-10SD NOV ADS-10SD | 272 273 | Deadhorse, Stacked Deadhorse, Stacked | Available Available |
| North Slope - Offshore | | | |
| BP Top Drive, supersized | Liberty rig | Inactive | BP |
| Doyon Drilling Sky top Brewster NE-12 | 15 (SCR/TD) | Spy Island, SP01-SE7 | ENI |
| Nabors Alaska Drilling OIME 1000 | 19AC (AC-TD) | Oooguruk, Stacked | ENI |
| 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 |
| Hilcorp Alaska LLC TSM-850 TSM-850 | 147 169 | Stacked Beluga River Unit | Hilcorp Alaska LLC Hilcorp Alaska LLC |
| Cook Inlet Basin – Offshore | | | |
| Hilcorp Alaska LLC National 110 | C (TD) Rig 51 Rig 56 | Platform C, Stacked Steelhead Platform, Stacked Monopod A-13, stacked | Hilcorp Alaska LLC Hilcorp Alaska LLC 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 |
| Mackenzie Rig Status | | | |
| Canadian Beaufort Sea | | | |
| SDC Drilling Inc. SSDC CANMAR Island Rig #2 | SDC | Set down at Roland Bay | Available |

The Alaska-Mackenzie Rig Report as of December 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*

| | Dec. 23 | Dec. 18 | Year Ago |
|----------------|---------|---------|----------|
| United States | 348 | 346 | 805 |
| Canada | 82 | 102 | 99 |
| Gulf of Mexico | 17 | 16 | 23 |

Highest/Lowest
US/Highest 4530 December 1981
US/Lowest 244 August 2020
*Issued by Baker Hughes since 1944

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● EXPLORATION & PRODUCTION

ANS averages 506,323 bpd in November

Output up 1% from October, down 4% from November 2019; Cook Inlet averaged 10,940 bpd, down 4% from October, 23% from '19

Cook Inlet gas production down 1.4%

Natural gas production in Cook Inlet averaged 227,036 thousand cubic feet in November, down 3,253 mcf, 1.4%, from an October average of 230,289 mcf, but up 4.6% from a November 2019 average of 217,128 mcf per day.

Eighty-six percent of production comes from the inlet's eight largest fields.

The largest, Hilcorp's Kenai gas field, accounted for just over 20% of November production, with an average of 45,937 mcf per day, up 2.7%, 1,197 mcf, from an October average of 44,739 mcf per day and up 39.5% from a November 2019 average of 32,923 mcf per day.

Hilcorp's McArthur River field, the inlet's largest oil producer, averaged 31,293 mcf of natural gas per day in November, down 3.4%, 1,119 mcf, from an October average of 32,412 mcf per day but up 39.6% from a November 2019 average of 22,412 mcf per day.

Hilcorp's Ninilchik averaged 29,791 mcf per day in November, up 9.3%, 2,541 mcf, from an October average of 27,250 mcf per day, but down 12.7% from a November 2019 average of 34,122 mcf per day.

The Beluga River field, operated by Hilcorp, averaged 24,188 mcf per day in November, down 7.8%, 2,034 mcf, from an October average of 26,222 mcf, but up 16.8% from a November 2019 average of 20,718 mcf per day.

Hilcorp's Swanson River field averaged 20,053 mcf per day, down 11.2%, 2,519 mcf, from an October average of 22,573 mcf, and down 46.5% from a November 2019 average of 37,466 mcf per day.

Hilcorp's North Cook Inlet averaged 17,661 mcf per day in November, up 1.9%, 321 mcf, from an October average of 17,340 mcf and up 27% from a November 2019 average of 13,910 mcf per day.

see **COOK INLET GAS** page 6

By **KRISTEN NELSON**
Petroleum News

Alaska North Slope production averaged 506,323 barrels per day in November, up 0.9% from an October average of 501,688 bpd but down 3.7% from a November 2019 average of 525,738 bpd. Crude oil was 89.5% of the total, 453,036 bpd, up 1.1% from October and down 3.6% from November 2019, while natural gas liquids averaged 53,287 bpd, down 0.7% from October and down 4.4% from November 2019.

The largest month-over-month volume increase was at the Hilcorp North Slope-operated Prudhoe Bay field, the Slope's largest, which averaged 273,122 bpd in November, up 7,033 bpd, 2.6%, from an October average of 266,089 bpd, but down 1.6% from a November 2019 average of 277,672 bpd.

Prudhoe crude oil volumes, 81.3% of its total production in November, averaged 221,988 bpd, up 5,231 bpd from an October average of 216,757, and down 1.6% from a November 2019 average of 225,503 bpd. Prudhoe NGLs averaged 51,133 bpd in November, up 3.7%, 1,802 bpd, from an October average of 49,331 bpd, and down 2% from a November 2019 average of 52,169 bpd.

In addition to the primary reservoir, production volumes from Prudhoe include Aurora, Borealis, Lisburne, Midnight Sun, Niakuk, Polaris, Point McIntyre, Put River, Raven and Schrader Bluff.

Production data come from the Alaska Oil and Gas Conservation Commission which reports production by field and well on a month delay basis.

Other month-over-month increases

The ConocoPhillips Alaska-operated Kuparuk River field averaged 97,752 bpd in November, up 1,672 bpd, 1.7%, from an October average of 96,080 bpd, and down 7.4% from a November 2019 average of 105,512 bpd.

In addition to the main Kuparuk pool, Kuparuk produces from satellites at Meltwater, Tabasco and Tarn, and from West Sak.

Hilcorp Alaska's Milne Point averaged 36,249 bpd in November, up 945 bpd, 2.7%, from an October average of 35,304, and continuing to climb, up 24.9%, from a November 2019 average of 29,023 bpd.

Endicott, operated by Hilcorp Alaska, averaged 7,131 bpd in November, up 8.9%,

584 bpd, from an October average of 6,547 bpd and down 5% from a November 2019 average of 7,505 bpd. Endicott crude oil, 86% of the field's November production, averaged 6,131 bpd, up 7.3% from October and down 5.9% from November 2019, while NGL production at the field, 14% of the total, averaged 999 bpd in November, up 20% from October and up 0.7% from November 2019.

Badami, operated by Savant Alaska, a Glacier Oil and Gas company, averaged 1,817 bpd in November, up 17.8%, 274 bpd, from an October average of 1,543 bpd and up 31.7% from a November 2019 average of 1,379 bpd.

ConocoPhillips' Greater Mooses Tooth, in the National Petroleum Reserve-Alaska, averaged 3,480 bpd in November, up 194 bpd, 5.9%, from an October average of 3,287 bpd but down 56.8% from a November 2019 average of 8,060 bpd.

Month-over-month declines

The largest month-over-month decline was at ConocoPhillips' Colville River, which averaged 48,773 bpd in November, down 2,150 bpd, 4.2%, from an October average of 50,923 bpd, and down 15.5% from a November 2019 average of 57,709 bpd.

In addition to oil from the main Alpine pool, Colville production includes satellite production from Fiord, Nanuq and Qannik.

Hilcorp Alaska's Northstar field averaged 6,912 bpd in November, down 1,952 bpd, 22%, from an October average of 8,864 bpd and down 28.2% from a November 2019 average of 9,629 bpd. Crude oil represented 83.3% of the field's production in November, 5,758 bpd, up 7.6% from October and down 18.3% from November 2019. Northstar NGL production for November averaged 1,154 bpd, 16.7% of the field's production, down 67.1% from October and down 55.3% from November 2019.

Eni's Nikaitchuq averaged 15,275 bpd in November, down 6.2%, 1,017 bpd, from an October average of 16,291 bpd and down 17.8% from a November 2019 average of 18,575 bpd.

Eni's Oooguruk averaged 7,166 bpd in November, down 499 bpd, 6.5%, from an October average of 7,665 and down 20.8% from a November 2019 average of 9,045 bpd

Point Thomson, operated by ExxonMobil

see **ANS PRODUCTION** page 6




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● EXPLORATION & PRODUCTION

Oil Search gets STP conditional easement

State of Alaska issues conditional easement to build a seawater treatment plant supporting the North Slope Pikka unit development

By KAY CASHMAN
Petroleum News

On Dec. 18 the Alaska Department of Natural Resources' Division of Oil and Gas approved a "conditional private exclusive easement" for Oil Search Alaska to build a seawater treatment plant "in support of the Pikka development project" on state tidelands adjacent to Oliktok Point west of the central North Slope.

"OSA's project is a temporary 6-acre structure adjacent to other oil and gas infrastructure on Oliktok Point" in Simpson Lagoon in the Kuparuk River unit.

Southeast of the east channel of the Colville River Delta and west of the ConocoPhillips Alaska-operated Kuparuk River unit, the purpose of the seawater treatment plant in Simpson Lagoon "is to provide a reliable and predictable supply of make-up water of sufficient quantity and quality for improved hydrocarbon extraction efficiency" from the Nanushuk and other reservoirs in the Pikka unit, the division said.

To be built off-site

The plant will be built off-site on a submersible barge and moved to the North Slope via sealift during the summer open water season. Upon arrival, the barge will be positioned on the east side of Oliktok Point and ballasted down to rest on the ocean floor.

Gravel fill will be placed over the area surrounding the barge and contained with sheet piling. Screeding of the seafloor will be done when the seawater treatment plant arrives on location, before it's installed.

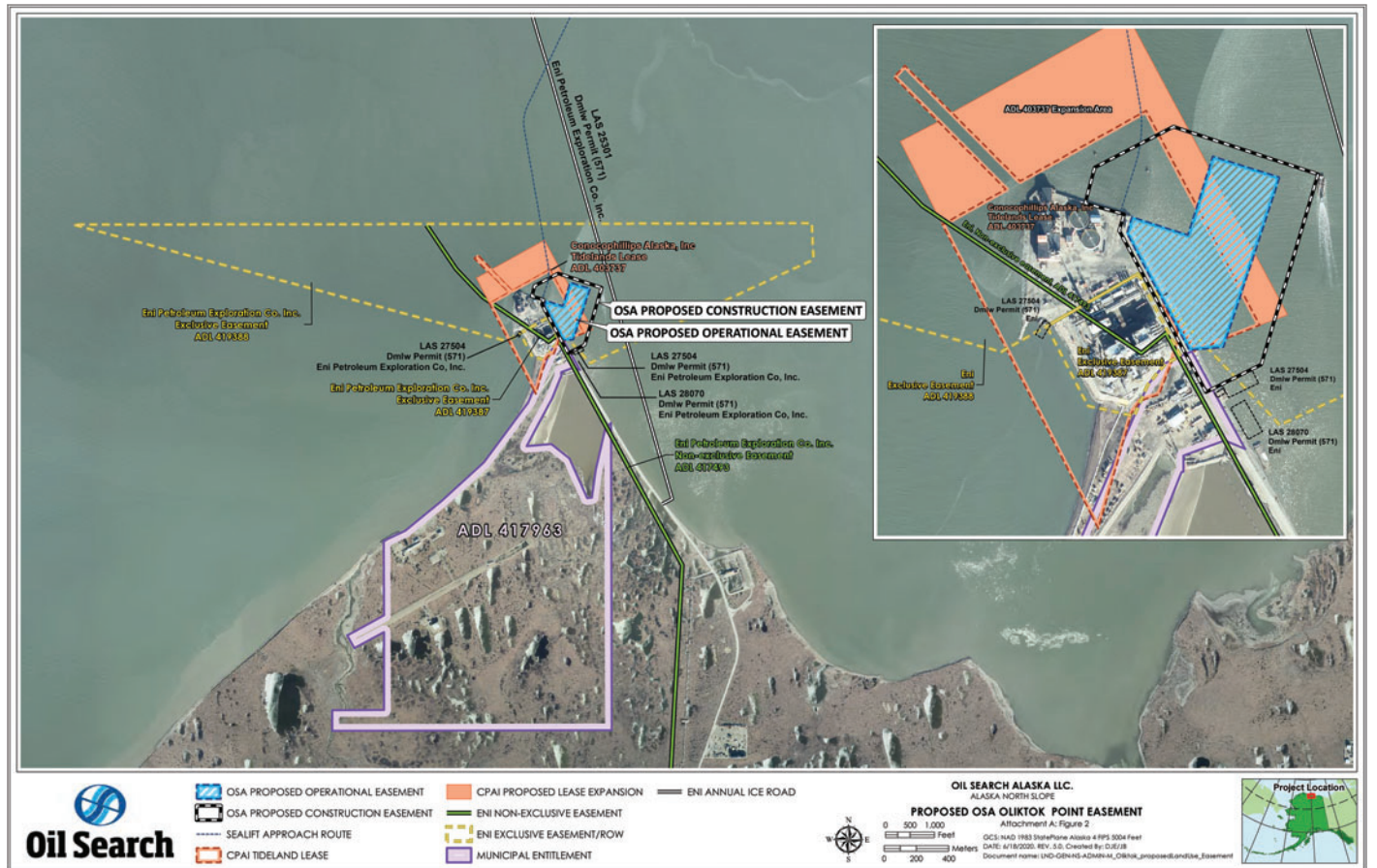
Screeding may occur in the same area as needed for maintenance; the Division wrote in its decision.

The plant will be equipped with a seawater intake structure, filtration system, power generation and heating system; and will be fully functional following connection to the yet-to-be constructed communications systems, fuel gas and seawater pipelines.

The initial construction easement is 30.3 acres and the operational easement 13 acres, including buffers.

Scope of decision

The scope of the division's decision is limited to determining if issuing an ease-



The plant will be built off-site on a submersible barge and moved to the North Slope via sealift during the summer open water season. Upon arrival, the barge will be positioned on the east side of Oliktok Point and ballasted down to rest on the ocean floor.

ment to Oil Search for a seawater treatment plant on state land will be of greatest economic benefit to the state and the development of its resources.

The agency decided in favor of Oil Search's application because:

- The Pikka project will "contribute significantly" to the local, regional, and state economy, and will work to offset declines in throughput of the Trans Alaska Pipeline System;
- "Alaska depends on revenues generated by oil and gas development for its economic well-being";
- The Pikka unit "infrastructure generates ad valorem tax revenue for the North Slope Borough and the state of Alaska";
- Finally, "in order to obtain these ben-

efits, the Pikka unit needs access to seawater."

In applying for an easement Oil Search provided a conceptual design for the seawater treatment plant, but before construction begins, "a detailed project execution plan and schedule, front end engineering and design (FEED) information, and additional environmental studies are required," the agency said.

Three phases

The decision gives Oil Search an entry authorization, or EA, for five years after the date of issuance and a conditional easement for the seawater treatment plant. The term of the easement, once the conditions of the EA have been met by the company, will be 35 years from the date of the Dec. 18 decision.

The conditional easement allows Oil Search the opportunity to finalize the project specifics and provide a "detailed project execution plan and other information necessary to properly assess the cumulative impacts," the division said.

The seawater treatment plant project consists of three phases, with different activities for each, the agency said: Pre-

construction and construction represent the first phase, operation and maintenance represent the second phase and termination is the third and final phase.

Potential interest conflicts

The easement is within active oil and gas lease ADL 355024 and tidelands lease ADL 403737, both issued to ConocoPhillips. It will require access through active oil and gas lease ADL 373301, also issued to ConocoPhillips. The easement is consequently contingent upon reasonable access to State of Alaska surface lands within those leases.

ConocoPhillips "has expressed concern" that authorization of seawater treatment plant easement "may cause potential unreasonable interference with existing and future KRU operations," the division said. "Because DNR will have an opportunity to review OSA's detailed project execution plan and FEED information before construction activities commence, any concerns raised by CPAI can be addressed." To ensure that unreasonable interference to existing operations will not occur, the division requires

see **OIL SEARCH EASEMENT** page 7

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continued from page 4

COOK INLET GAS

Hilcorp's Beaver Creek averaged 13,809 mcf per day in November, up 4.7%, 621 mcf, from an October average of 13,188 mcf, and up 86.8% from a November 2019 average of 7,393 mcf per day.

Furie Operating's Kitchen Lights averaged 13,299 mcf per day in November, down 5.8%, 816 mcf, from an October average of 14,114 mcf and up 0.8% from a November 2019 average of 13,195 mcf per day.

There are 12 smaller fields — two others, Redoubt Shoal and West McArthur River, are shutdown.

AIX's Kenai Loop averaged 5,094 mcf per day in November, up 0.6%, 29 mcf, from an October average of 5,065 mcf and down 5.7% from a November 2019 average of 5,401 mcf per day.

Hilcorp's Cannery Loop averaged 4,981 mcf per day in November, up 2.2%, 109 mcf, from an October average of 4,872 mcf and down 31.6% from a November 2019 average of 7,279 mcf per day.

Hilcorp's Granite Point averaged 3,758 mcf per day in November, down 0.2%, 8 mcf, from an October average of 3,766 mcf and up 38% from a November 2019 average of 2,722 mcf per day.

Hilcorp's Ivan River averaged 3,682 mcf per day in November, down 18.9%, 857 mcf, from an October average of 4,538 mcf and up 906% from a November

Eighty-six percent of production comes from the inlet's eight largest fields. The largest, Hilcorp's Kenai gas field, accounted for just over 20% of November production, with an average of 45,937 mcf per day, up 2.7%, 1,197 mcf, from an October average of 44,739 mcf per day and up 39.5% from a November 2019 average of 32,923 mcf per day

2019 average of 366 mcf per day.

Hilcorp's Deep Creek averaged 3,629 mcf per day in November, down 2.3%, 85 mcf, from an October average of 3,714 mcf and down 18.5% from a November 2019 average of 4,453 mcf per day.

The North Fork field, purchased by Gardes Holdings in September, averaged 3,184 mcf per day in November, down 1%, 32 mcf, from an October average of 3,216 mcf and down 13.8% from a November 2019 average of 3,693 mcf per day.

BlueCrest's Hansen field averaged 2,846 mcf per day in November, down 0.9%, 25 mcf, from an October average of 2,871 mcf and down 50% from a November 2019 average of 5,689 mcf per day.

Hilcorp's Trading Bay averaged 1,945 mcf per day in November, down 21.4%, 530 mcf, from an October

average of 2,475 mcf and down 34.5% from a November 2019 average of 2,968 mcf per day.

Hilcorp's Lewis River averaged 986 mcf per day in November, down 6.7%, 71 mcf, from an October average of 1,057 mcf and down 13.8% from a November 2019 average of 1,143 mcf per day.

Hilcorp's Nikolaevsk averaged 345 mcf per day in November, down 4.6%, 17 mcf, from an October average of 362 mcf and down 20.1% from a November 2019 average of 432 mcf per day.

Amaroq's Nicolai Creek averaged 313 mcf per day in November, up 24.4%, 61 mcf, from an October average of 251 mcf and up 68.7% from a November 2019 average of 185 mcf per day.

Hilcorp's Middle Ground Shoal averaged 242 mcf per day in November, down 7.8%, 21 mcf, from an October average of 263 mcf and down 9.3% from a November 2019 average of 267 mcf per day.

This data is from the Alaska Oil and Gas Conservation Commission, which reports production on a month-delay basis. For natural gas AOGCC reports measurements in thousands of cubic feet, mcf.

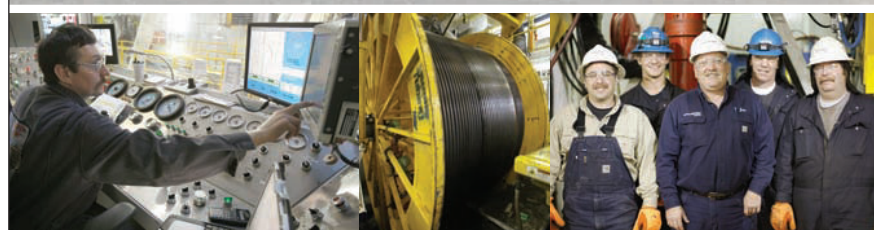
Cook Inlet natural gas production peaked in the mid-1990s at more than 850,000 mcf per day.

—KRISTEN NELSON

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continued from page 4

ANS PRODUCTION

Production, averaged 8,646 bpd in November, down 4.9%, 449 bpd, from an October average of 9,096 bpd but up 584.8% from a November 2019 average of 1,263 bpd.

Cook Inlet

Cook Inlet production averaged 10,940 bpd in November, down 3.6%, 395 bpd, from an October average of 11,348 bpd and down 22.5% from a November 2019 average of 14,117 bpd.

Hilcorp's Beaver Creek averaged 134 bpd in November, down 16 bpd, 10.5%, from an October average of 149 bpd and down 35% from a November 2019 average of 206 bpd.

Hilcorp's Granite Point averaged 2,958 bpd in November, down 19 bpd, 0.7%, from an October average of 2,977 bpd but up 9.1% from a November 2019 average of 2,712 bpd.

BlueCrest's Hansen field averaged 917 bpd in November, down 118 bpd, 11.4%, from an October average of 1,035 bpd and down 22.7% from a November 2019 average of 1,186 bpd.

Hilcorp's McArthur River, Cook Inlet's largest field, averaged 3,843 bpd in November, down 48 bpd, 1.3%, from an October average of 3,892 bpd and down 15.6% from a November 2019 average of 4,553 bpd.

Hilcorp's Middle Ground Shoal averaged 1,242 bpd in November, down 13 bpd, 1.1%, from an October average of 1,255 bpd and down 6.4% from a November 2019 average of 1,326 bpd.

Hilcorp's Swanson River averaged 789 bpd in November, down 8 bpd, 1%, from an October average of 797 bpd and down 5% from a November 2019 average of 831 bpd.

Hilcorp's Trading Bay averaged 1,057 bpd in November, down 14.9%, 266 bpd, from an October average of 1,242 bpd and down 22.6% from a November 2019 average of 1,366 bpd.

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

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• ALTERNATIVE ENERGY

More Mount Spurr geothermal exploration

State proposes issuance of a two- to three-year prospecting permit for the southern flank of volcano to Raser Power Systems LLC

By ALAN BAILEY

For Petroleum News

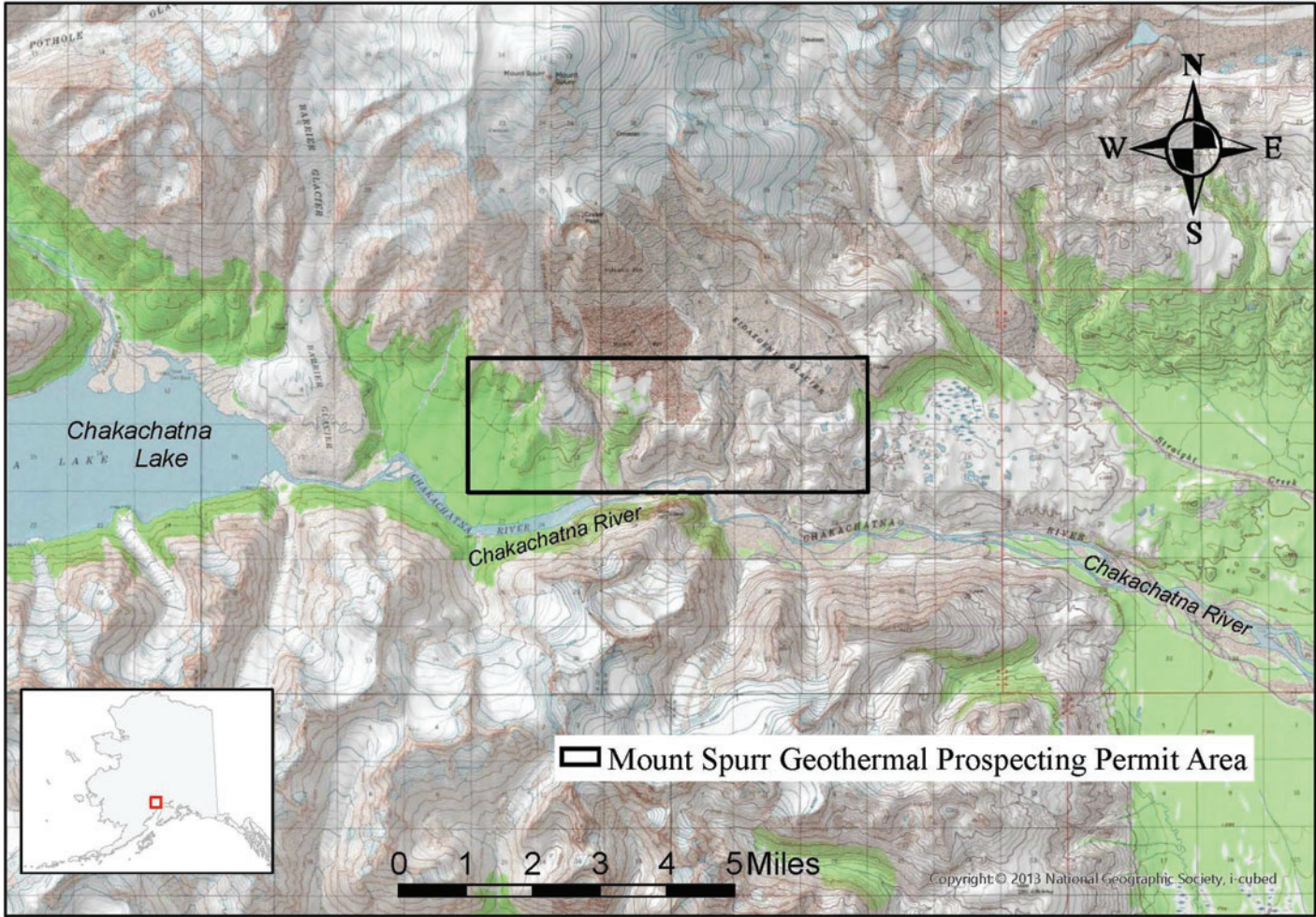
Alaska’s Division of Oil and Gas has issued a preliminary finding, proposing the issuance of a noncompetitive prospecting permit to Raser Power Systems LLC, for geothermal exploration on the southern flank of the Mount Spurr volcano. The permit area encompasses about 6,750 acres in three tracts, about 80 miles from Anchorage and about 40 miles west of Tyonek on the west side of Cook Inlet. Raser Power Systems is a geothermal company based in Salt Lake City.

The permit grants Raser Power the exclusive right to prospect in the designated land tracts for two years, with the possibility of an extension for a further year if the company has been unable, “despite reasonable diligence,” to discover a commercially viable geothermal resource within that initial two-year period.

The division says it only received one application for a permit following a call for applications in February 2019 — hence the proposed issue of a non-competitive prospecting permit at a rental rate of \$3 per acre. Raser Power will need an approved plan of operations and all relevant federal, state and local permits before commencing operations on the land tracts.

Volcanic heat

One of a series of volcanoes along the Alaska Peninsula and the north side of the Cook Inlet, Mount Spurr clearly pinpoints an area where there is geothermal heat in the subsurface. And, with the area of geothermal interest being around 40 miles from the Beluga power station on the Alaska Railbelt electricity grid, there is the potential to establish a geothermal power plant at Mount Spurr, should a viable geothermal energy source be discovered. A geophysical survey conducted



in the 1980s pointed to the possible existence of a layer of warm or hot brine 2,000 feet below a plateau at the entrance to the pass on the south flank of the mountain.

In 2008 Ormat Technologies, a Lower 48 geothermal company, paid \$3.5 million for 15 state leases on the flanks of Mount Spurr. In 2009 the company began an evaluation of its leases by conducting various forms of aerial survey, coupled with gravity and electromagnetic measurements. The company followed up in 2010 with the drilling of two core holes to depths of 1,000 feet. Then, in 2011, the company brought in a drilling rig to drill

to a depth of 4,000 feet.

Unfortunately the drilling failed to discover a viable geothermal resource, with Ormat encountering difficulties in drilling through a conglomeratic rock formation to test presumed hotter rocks

underneath. The company eventually decided to write off the \$7.3 million it had invested in the project. However, given the obvious heat associated with the

see **SPURR GEOTHERMAL** page 8

continued from page 5

OIL SEARCH EASEMENT

Oil Search to enter into an equitable use agreement with ConocoPhillips and other Oliktok Point operators.

ENI’s onshore production pad for the Nikaitchuq unit easement ADL 419387 is also adjacent to the seawater treatment project easement site on Oliktok Point. ENI did not comment on the proposed project.

On Aug. 18, Oil Search applied for an easement for related seawater and fuel gas pipelines easement on ADL 417493. At the time of the Dec. 18 decision, that application was still being adjudicated.

Construction and other access

Access to the area for construction and operation of the Dec. 18 easement will be through existing Kuparuk River unit infrastructure and ancillary oilfield roads, regulated by security checkpoints in Deadhorse, and under agreements for the use of these improvements with others, the division wrote, noting its decision does not authorize use of those other improvements.

Oil Search must coordinate construction, operations, and maintenance activities with other lease and easement holders. During operations, the public will be

“allowed access to and along public and navigable water bodies within the various easements,” the agency said.

Performance guarantee, insurance

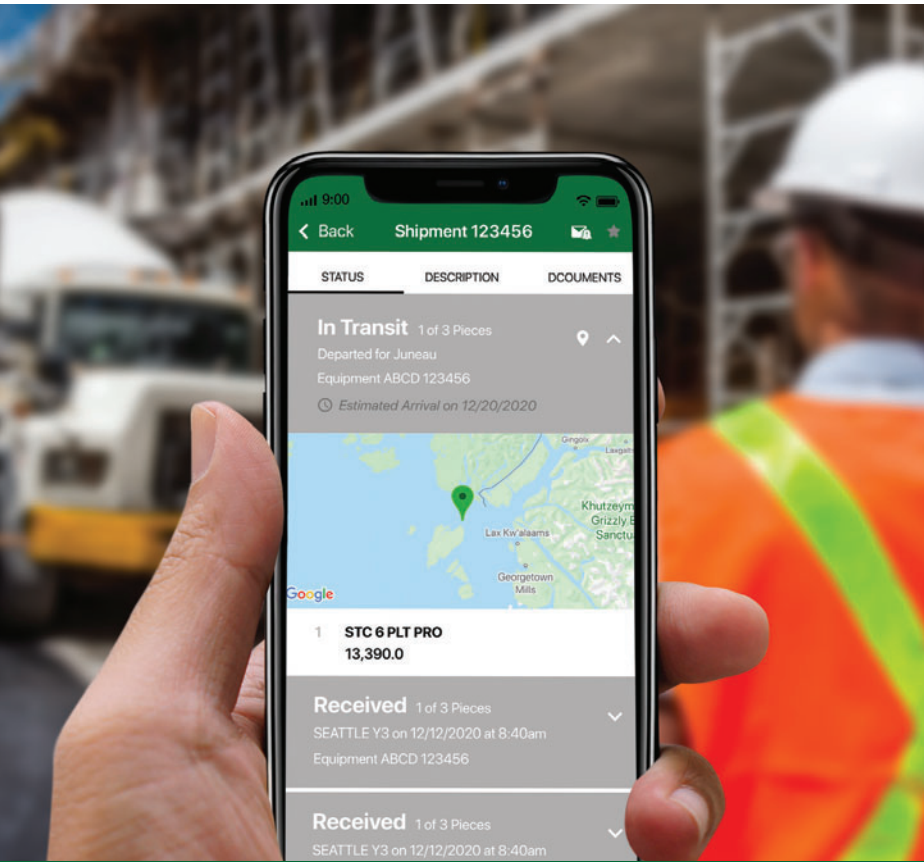
One of the conditions of the approval is for Oil Search to enter into a “comprehensive financial assurances agreement” with DNR that is “inclusive of all OSA DR&R liabilities related to the Pikka unit development, including the infrastructure located outside the unit. To facilitate accurate DR&R cost estimation, OSA shall deliver to DNR a DR&R cost estimate of the STP, completed by a third-party engineering firm and agreed to by DNR, no later than June 15.”

To protect the state from “liability associated with facility construction under the EA and use and maintenance of the facilities under the project easements” Oil Search also must provide and maintain a commercial general liability insurance policy with the state.

As is required for similar cases, the insurance requirement for the EA and project easement must be for no less than \$1 million per occurrence and \$2 million general aggregate.

The insurance obligation may be adjusted periodically by the division. ●

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FURIE REQUEST

from the seafloor into the waters of Cook Inlet.

Hendrix petitioned the commission to change the status of the three wells to plugged and abandoned and AOGCC scheduled the hearing.

The three, KLU Nos. 1, 2A and 4, all have downhole barriers and surface plugs set per the commission's regulations, Hendrix said. The wells have been rendered incapable of any production or flow, he said.

Furie is requesting a variance to AOGCC regulations for offshore location clearance to reclassify the three KLU wells as plugged and abandoned. The commission's regulations for offshore wells (the relevant section is dated 1999) require removal of "wellhead equipment, casing, piling, and other obstructions to a depth at least five feet below the mudline before removing the drill rig, unless otherwise approved by the commission as adequate to protect public health and safety."

Wells with casing stubs

Hendrix said six offshore Cook Inlet wells close to the Kitchen Lights unit have previously been granted abandoned status with stubs of 6 to 12 feet above the seabed and are identified on National Oceanic and Atmospheric Administration navigational charts. Those wells, he said, have not posed a threat to navigation or commercial, subsistence or recreational activities in the area.

Rick Dusenbery, Furie's chief operating officer, told the commission it is only

the 30-inch conductor pipe that remains above the seafloor in the Furie wells. All three KRU wells were properly plugged in accordance with regulations, he said.

Commissioner Dan Seamount asked if the company knew why the previous operator didn't P&A the wells.

Dusenbery said if you don't P&A it generally means you plan to go back in, but Hendrix said all they can do is assume — they didn't know why the previous operator didn't P&A.

Other exploration wells

Dusenbery said the exploration wells abandoned in the area in similar condition include the SRS State Nos. 1 and 2, drilled by Shell Oil Co. in 1965. Those wells, suspended after drilling operations ended, are cemented, but casing stubs remain. In 1967 Shell applied to change the status on the wells from suspended to abandonment, a change approved by Tom Marshall of the commission (this was the commission's predecessor, the Alaska Oil and Gas Committee, when AOGCC, under an earlier name, was part of the Department of Natural Resources).

SRS State No. 1 has 30-inch casing reported 12 feet above the seafloor by NOAA on navigational charts and obstruction lists and there have been no issues reported in the 53 years since; the same is true for SRS State No. 2, which has 10 feet of 30-inch casing above seafloor, Dusenbery said.

There are also four Pan American wells with casing stubs above the seafloor near the Kitchen Lights unit, he said: Cook Inlet state Nos. 1-2, Middle Ground Shoal 18746 No. 1 and Forelands State Unit No. 1 — all with

see **FURIE REQUEST** page 12

EXPLORATION & PRODUCTION

US drilling rig count up by 2 to 348

The Baker Hughes U.S. rotary drilling rig count continued to increase, up by two to 348 when the Christmas week count was released Dec. 23, still down substantially, by 457, from a count of 805 a year ago.

When the count hit 244 in mid-August last year, it was not just the low for 2020, but the lowest the count has been since the Houston based oilfield services company began issuing weekly U.S. numbers in 1944.

Prior to 2020, the low was 404 rigs in May 2016. The count peaked at 4,530 in 1981.

The count was in the low 790s at the beginning of 2020, where it remained through mid-March, when it began to fall, dropping below what had been the historic low in early May with a count of 374 and continuing to drop through the third week of August when it gained back 10 rigs.

The Dec. 23 count includes 264 rigs targeting oil, up one from the previous week but down 413 from 677 a year ago, 83 rigs targeting gas, up by two from the previous week but down 42 from 125 a year ago, and one miscellaneous rig, down by one from the previous week and down two from a year ago.

Twenty-two of the holes were directional, 309 were horizontal and 17 were vertical.

Alaska count down by one

Louisiana (43) was up by three rigs from the previous week, Oklahoma (16) was up by two and Texas (159), which has the most active rigs in the country, was up by one rig.

Alaska (2), Colorado (6), New Mexico (65) and West Virginia (8) were each down by one rig week-over-week.

Rig counts were unchanged in the remaining states: California (6), North Dakota (11), Ohio (5), Pennsylvania (19), Utah (3) and West Virginia (9).

Baker Hughes shows Alaska with two active rigs Dec. 23, down one from the previous week and down five from a year ago.

The rig count in the Permian, the most active basin in the country, was down by one from the previous week at 173, and down 232 from a count of 405 a year ago.

—KRISTEN NELSON

PIPELINES & DOWNSTREAM

RCA approves transfer of 5% PTE interest

The Regulatory Commission of Alaska has approved an application filed in November 2019 by ExxonMobil Pipeline Co. and BP Transportation (Alaska) Inc. for transfer of a 5% interest in PTE Pipeline LLC from ExxonMobil Pipeline to BPTA.

The proposed 5% interest transfer is part of the transaction in which BP is exiting Alaska and selling its upstream Alaska assets to Hilcorp and its midstream assets to Harvest, Hilcorp's midstream affiliate.

The companies told RCA that the 5% interest transfer "is intended to better align ownership interests in the PTE Pipeline with those in the Point Thomson Unit."

The PTE Pipeline is a 12-inch inside diameter, 22-mile common carrier liquid petroleum transportation line from the central processing facility at Point Thomson to a connection to the Badami Pipeline at the Badami central processing facility, the companies said in their 2019 application. The line has a capacity of some 70,000 barrels per day, with a currently established remaining economic life of 19 years, through 2045, "which could be extended if new or additional oil production is developed in the area that it serves."

ConocoPhillips Alaska formerly held a working interest of some 5% in the Point Thomson unit, but was not a partner in the PTE Pipeline. In May 2017 ConocoPhillips said it was relinquishing its working interest ownership in the Point Thomson unit to the other unit owners per the unit operating agreement.

ExxonMobil Pipeline holds a 68% interest in the PTE Pipeline and BPTA holds 32%. After the transfer, ExxonMobil Pipeline will hold 63% and BPTA 37%.

The companies told RCA the transfer would occur at the same time or shortly after Harvest Alaska purchased the stock of BPTA. RCA granted the transfer of 100% of stock ownership interest on Dec. 14 and on Dec. 21 RCA received notice that the transaction closed Dec. 18. "BPTA is now a wholly owned subsidiary of Harvest Alaska," the commission said.

—KRISTEN NELSON

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SPURR GEOTHERMAL

active Mount Spurr volcano, coupled with its convenient location, the geothermal potential of the area remains intriguing.

Current volcanic activity

The current active vent for the volcano consists of Crater Peak, on the volcano's southern flank, above and to the north of

the prospecting tracts. There is a discontinuous zone of weak geothermal activity, including warm seeps, springs and fumaroles, extending from south of Crater Peak to the north side of Mount Spurr. And there is a meltwater lake created by increased heat flux that began in 2004 at the mountain's summit, the division says. ●

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INSIDER

erning due process protections and AOGCC’s own internal regulations. “Constitutionally,” Amaroq says, “Section 8, Article VIII, protects public lands against damage or injury. The AOGCC, both in regulation and application, has violated the Alaska Constitution.”

The state department with jurisdiction over bonding, the company says, is the Department of Natural Resources, which was created and granted its authority by way of Article VIII of the Alaska Constitution. Section 1 of Article VIII says, “It is the policy of the State to encourage the ... development of its resources by making them available for maximum use consistent with the public interest.”

Section 8 of Article VIII pertains to leasing resources through DNR and says the Alaska Legislature “may provide for the leasing of, and the issuance of permits for exploration of, any part of the public domain or interest therein, subject to reasonable concurrent uses. Leases and permits shall provide, among other conditions, for payment by the party at fault for damage or injury arising from noncompliance with terms governing concurrent use, and for forfeiture in the event of breach of conditions.”

Going back to beginning

In 1978, the Legislature created AOGCC by amending AS 31.05 by Chapter 158, SLA. Effective Jan. 1, 1979, AOGCC became an independent agency within the executive branch of the state.

Initially, AOGCC was housed within DNR, Amaroq says. In 1980 it was transferred to the Department of Commerce and Economic Development. On Feb. 17, 1994, Gov. Hickel moved it to the Department of Administration. On Feb. 13, 2019, Gov. Mike Dunleavy transferred AOGCC back to Commerce through Administrative Order No. 307.

The constitutionally defined entity empowered to oversee full compliance of a DNR lessee is DNR, not AOGCC, Amaroq states.

DNR “properly exercised its jurisdictional responsibilities” when Amaroq applied to become the lessee at the Nicolai Creek unit in the Cook Inlet basin by requiring Amaroq to enter into a dismantlement, removal and restoration, or DR&R, agreement and to fund a trust account that is controlled by DNR.

Consistent with its jurisdictional responsibilities, DNR explicitly required Amaroq to meet all of the plugging and abandonment, or P&A, requirements of AOGCC before DNR would release the residual cash held in the DR&R trust account to Amaroq at the end of Nicolai Creek unit’s economic life.

AOGCC’s new per well bonding requirements are “duplicative with the financial responsibility requirements imposed by DNR” — and exceed its authority because it’s requiring financial responsibility for something that is under DNR’s jurisdiction, Amaroq says.

The company also claims AOGCC erred in issuing the order when it imposed a new bonding requirement on Amaroq to post an additional \$700,000 “without a rational basis” to support the increase over the company’s already posted bond on the six wells in the Nicolai Creek unit.

No new wells proposed

Amaroq says it has not proposed to drill any wells and that AOGCC’s bonding requirements “by the plain language of the regulation” apply to an operator proposing to drill a well.

Moreover, the May 18, 2019, revisions of 20 AAC 25.025 “sought to impose bond requirements based on the number of wells operated by a small producer, and based on a blanket bond amount, irrespective of the number of wells operated, for a larger producer,” Amaroq says in its appeal.

Amaroq tells the court that AOGCC’s order violates its right to equal protection guaranteed by the Alaska Constitution and the United States Constitution because the bonding requirement treats Amaroq differently from larger operators in Alaska.

Amaroq asks the court

Amaroq asks the court to hold a “trial de novo” to establish the relevant facts and application of the laws and regulations on the basis AOGCC failed to provide due process to Amaroq and has “demonstrated it cannot be fair and impartial” to the company.

Amaroq also asked the court for a stay of enforcement of the May 18, 2019, revisions and of AOGCC’s

Amaroq decision and order.

—KAY CASHMAN

Mustang files year-end report

ON DEC. 28 MUSTANG HOLDING provided a year-end report to the Alaska Department of Natural Resources’ Division of Oil and Gas on its progress toward the continued viability and operations of the North Slope Southern Miluveach unit, which contains the Mustang oil field and infrastructure.

Using experienced oilfield services firms, the company is maintaining Mustang in a cold shutdown mode while lender AIDEA — the Alaska Industrial Development and Export Authority — continues to look for a new operator/owner.

Many 2020 SMU activities are listed in the division’s eighth plan of development decision issued Dec. 4, but Mustang Holding’s year-end report provides an update, saying it has established a data room and “entered into several non-disclosure agreements with qualified parties” capable of operating and/or providing the capital required for the full SMU development drilling program, as well as the following:

- Assumed the storage contracts for equipment and other property that will be used when active operations resume;
- Finalizing the assumption of the ASRC Energy Services Alaska contract for pad, well and pipeline surveillance and monitoring;
- Paid SMU lease rentals;
- Submitted filings to the Alaska Oil and Gas Conservation Commission regarding SMU operatorship and ownership, and is discussing bonding with AOGCC and DNR;
- Updating the SMU C-Plan;
- Established a data room and has entered into several non-disclosure agreements with qualified parties who are capable of operating and/or providing capital for a full SMU development drilling program.

Mustang Holding and major creditors have also recorded liens for prior work in the SMU, working together to finalize plans to advance the resumption of development.

—KAY CASHMAN

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WILLOW INJUNCTION

Environmental Policy Act, the Federal Land Policy and Management Act, and the Administrative Procedures Act when approving the ConocoPhillips project. The development includes the construction of drill sites, a processing center, an operations center and access roads. The appellees claim that BLM had failed to adequately consider the potential environmental impacts of the project, including the potential impacts on wetlands, the

tundra and wildlife, in particular on polar bears, a species designated as threatened under the Endangered Species Act. The case also claims the potential for adverse impacts on the nearby community of Nuiqsut.

The new motion argues that a preliminary injunction is necessary to prevent Willow construction activities from taking place until the District Court lawsuit is resolved.

Lease sale appeal

Meanwhile, on Dec. 22 the U.S. Court of Appeals for the 9th Circuit issued an

order rejecting a petition by environmental groups for an en banc rehearing of an appeal against the legal validity of a 2017 BLM oil and gas lease sale in the NPR-A.

ConocoPhillips bought some leases in the sale in support of its exploration strategy in the NPR-A. There is particular interest in making further oil discoveries in the Nanushuk formation in the region. The Nanushuk has been the focus of major oil discoveries in the region, including the discovery of the Willow oil field.

As reported in the July 19 issue of

Petroleum News, on July 9 a panel of 9th Circuit judges dismissed the appeal against the lease sale, saying that BLM had complied with the National Environmental Policy Act in its decision to hold the sale. The environmental organizations that had launched the appeal subsequently requested an en banc hearing. However, the court's rejection of this request brings the 9th Circuit case to an end, with the court finding in favor of BLM. ●

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CLEANUP FUNDS

Garnet Amundson, president of Essential Energy Services, said he like many of his peers is disappointed and frustrated at a time when he has laid off half his staff, rolled back wages for senior employees and suspended bonus programs.

He said Essential Energy has received some well cleanup money but said that allocation is well short of the conservative estimates he had targeted.

Amundson said "almost everyone is unhappy," covering oil and gas producers who can't get their well sites cleaned up, farmers and landowners who have been pressing for years to get action on the polluting wells and environmental groups that are critical of our failure to clean up the well site mess."

Alberta yet to receive money

So far Alberta has spent about one quarter of its allocated C\$1 billion — with C\$179 million going to downhole abandonment activity and C\$85 million

to environmental reclamation — although it has yet to receive the money.

Energy Minister Sonya Savage said her officials are "working around the clock" to improve the application procedures.

Mark Scholz, president of the Canadian Association of Oilwell Drilling Contractors, said more adjustments are needed if the program is to serve as a "buffer" for the service sector in 2021 as companies "grapple with a very gradual, modest, but volatile recovery."

Not everyone is unhappy. The Indian Resource Council, after lobbying and holdings meetings with Alberta government leaders, said it has secured commitments of C\$100 million to clean up orphaned wells on aboriginal land.

Stephen Buffalo, president of the IRC, said that after balking at the IRC's request for a portion of the funds the Alberta government has now shown it is prepared to work with the more than 100 communities that have oil and gas reserves on their land.

"It sure took some time, but we just kept giving them a reason not to say 'no.' To me, it just made a lot of sense," he said.

Effort could be overwhelmed

While the money has started to trickle out, the challenge faced by Alberta threatens to overwhelm the cleanup effort.

Canada's Orphan Well Association, mostly funded by the industry, could inherit 12,000 additional well sites, mostly stemming from bankruptcies, although the Alberta Energy Regulator said that not all the estimated wells involved in insolvency hearings will be abandoned.

Alberta, Saskatchewan and British Columbia have an estimated 125,000 inactive wells, though only a fraction are deemed to have been abandoned.

The Alberta regulator said some companies will successfully restructure and others will see their assets scooped up by competitors such as Ember Resources which acquired about 1,100 wells from Trident Exploration when it folded in 2019.

Nina Lothian, fossil fuels director at Pembina Institute, a green energy think tank, told the Globe and Mail that the prospect of another 12,000 wells being added to the thousands already abandoned "will make it even harder to man-

age the inventory without relying on the public purse."

COVID impact

Getting crews to most of the well sites is a challenge that is compounded by the danger facing workers operating and living in confined spaces.

Alberta's northern health zone has reported that hundreds of positive COVID-19 cases are tied to oil sands operations, with 13% of employees found to be infected by the virus in early December.

The list of affected companies covers most of the major players — Imperial Oil, Suncor Energy, Syncrude Canada and Canadian Natural Resources — whose cases have totaled 258, but a spokesman for Syncrude said there is a "strong likelihood" that the virus was contracted in the wider region rather than the workplace, stemming from the frequency with which workers fly in and fly out of camps. ●

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LNG STUDY

Major Projects Coalition, both of which contributed to the study, support LNG Canada, a consortium led by Royal Dutch Shell that is building an C\$18 billion export terminal near Kitimat, British Columbia, that is scheduled to start exports in 2025.

Terminal on traditional territory

The LNG terminal is being built on the traditional territory of the Haisla Nation, whose chief councilor Crystal Smith said the relationship with LNG Canada is positive and includes training and employment of her community members.

The Conference Board said that although LNG Canada's related Coastal GasLink pipeline has reached benefits agreements with 20 elected First Nations councils ... lingering opposition to the project poses complications such as "discussions about territorial rights, benefits and impacts."

She said the Conference Board findings confirm what the Haisla Nation already knew "that LNG is a big driver of opportunity for Indigenous communities."

A spokeswoman for LNG Canada said

Kitimat has so far awarded more than C\$2 billion in contracts to Indigenous and local businesses.

But these positive signs have failed to sway project opponents, such as the Canadian Center for Policy Alternatives, which has warned about methane leaks from the production of LNG feedstock natural gas, and Stand.earth, which challenges claims that LNG can displace coal and power plants in Asia.

The Institute for Energy Economics and Financial Analysis has also challenged Conference Board estimates that about 96,550 direct and indirect jobs could be created annually if proposed projects in British Columbia achieve their full potential over the next 44 years.

Complications

The Conference Board said that although LNG Canada's related Coastal GasLink pipeline has reached benefits agreements with 20 elected First Nations councils along the route and has awarded C\$870 million in employment contracts

and funding to Indigenous communities, lingering opposition to the project poses complications such as "discussions about territorial rights, benefits and impacts."

The report also noted that four Indigenous leaders have formed the First Nations Climate Initiative as a British Columbia-based think tank to promote "the role of Indigenous people in climate change mitigation and poverty alleviation. The group promotes LNG development as a solution to both problems."

In addition, the Conference Board noted that a First Nations Limited Partnership is a C\$500 million commercial entity that has signed a commercial First Nations benefits pact, while HaiSea Marine, a joint venture between the Haisla Nation and Seaspan, has been awarded a C\$500 million contract to provide 70 marine and onshore tug services to LNG Canada.

—GARY PARK

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OIL PRICES

Minister Alexander Novak at a Moscow press conference Dec. 25.

Novak said Russia would likely support a new supply increase beginning in February of 500,000 barrels per day by the Organization of the Petroleum Exporting Countries and its allied producing countries, of which Russia is a part.

The group, known as OPEC+, agreed in a December meeting to institute a 500,000-bpd production boost to begin in January, and it will hold its 13th OPEC and non-OPEC Ministerial Meeting Jan. 4 to consider production levels for February.

“To restore our output, that we’ve reduced a lot, the price range of \$45 to \$55 a barrel is the most optimal,” Novak told reporters in Moscow, according to Bloomberg. “Otherwise, we’ll never restore production, others will restore it.”

“If the situation stays normal and stable, we will support this position,” Novak said.

OPEC+ will end 2020 with a total production cut in place of 7.7 million bpd, which will drop to 7.2 million bpd in January. The group had scheduled a January production boost of 2 million bpd, but it agreed to a quarter of that amount due to spikes in COVID-19 cases.

“We must reach levels that were envisaged earlier, from Jan. 1, gradually, without pulling the market too much,” Novak said.

Looking for 2021 recovery

In a Dec. 28 interview with Rossiya 24 TV channel, Novak offered bullish expectations for demand, saying the emergence of coronavirus vaccines on the global market is acting to restore oil demand, and that the market may return to pre-crisis parameters during 2021.

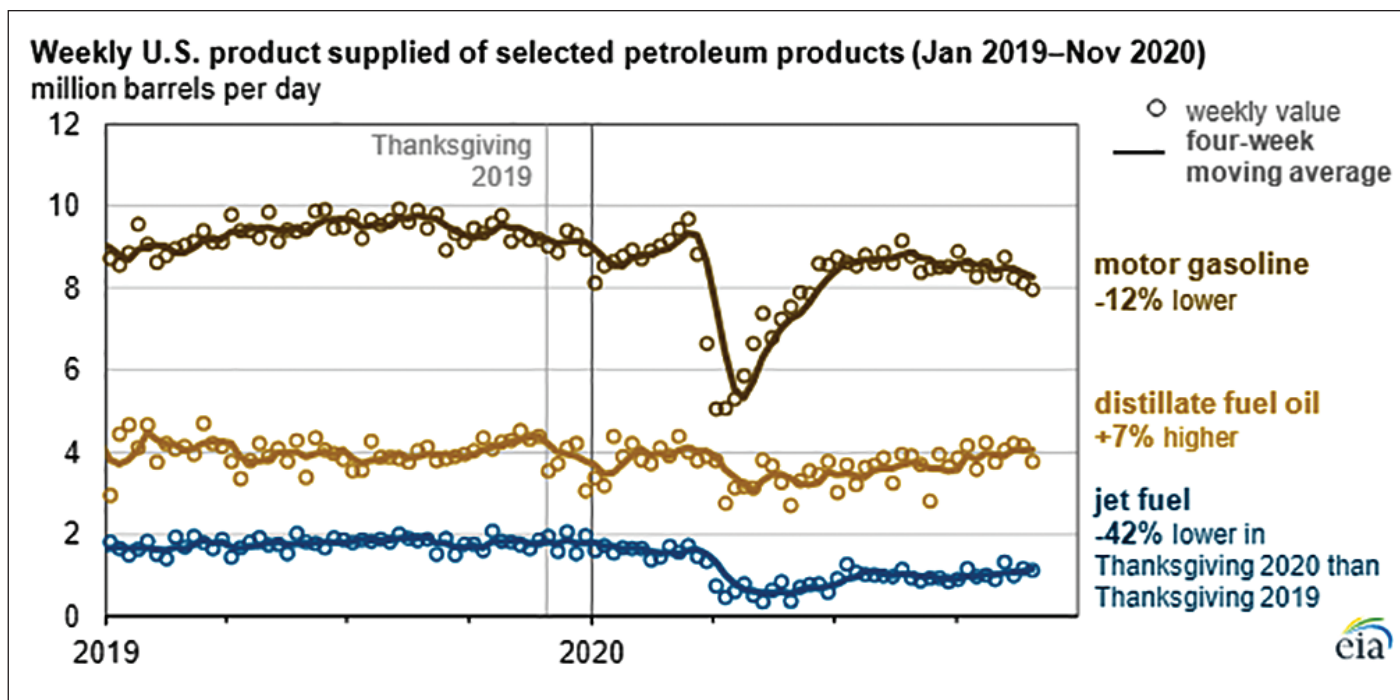
“Before the end of 2020, we have already seen a recovery in demand, but, nevertheless, we did not reach the parameters that we had before the crisis,” he said. “We hope that throughout 2021 we will, however, reach pre-pandemic figures.”

“Today, demand has not yet recovered by about 7-8 million barrels per day compared to the pre-crisis period,” Novak said, adding that the decline was much bigger, and this year most of the demand has already recovered.

“Next year, we expect additional growth in demand of about 5-6 million barrels (per day),” he said. “This is an optimistic forecast.”

Daniel Yergin, IHS Markit vice chairman, cautioned that demand recovery will take time.

Oil demand is not likely to return to late 2019 levels until the end of next year or even later, Yergin told Al Arabiya in a Dec.



28 interview.

Asked if U.S. shale could ever recover to its previously rapid, multi-million barrels per day year-on-year growth, Yergin said, “Let me give you a very simple answer, the answer is no.”

“The view that we have at IHS Markit is that shale will be pretty much at a flat level around 11 million barrels per day until the second or third quarter of next year when we start to see it rise again with prices and demand coming back, but that would be a much more modest rate,” he said. “So that 1.5 million barrels per day, that 2 million barrels per day that was so disruptive for the oil market, that’s history.”

When demand begins to return, the low-cost producers of the Arabian Gulf could be the ones to benefit, Yergin said.

“I think we will see oil prices rise when we get out of what I describe, or what I like to call the virus alley — oil prices stuck between the virus on one side and vaccines on the other — and once we get back to normal economic growth next year ... about 3.6%, we’ll see demand rise and prices will get into a more reasonable range that will support investment and will at least draw back some investors,” he said.

The recovery in prices is likely to be gradual, Yergin said, adding that it would lack the price spikes that were associated with demand growth in the 2000s.

“I don’t see a spike in prices like we had with emerging market demand growing in the first decade of this century, and I think that there is a greater sense of energy security because of the growth of oil supply around the world, and shale is one of stabilizers for that, and I think from the viewpoint of the oil industry it’s a good thing not to have price spikes because that also negatively effects demand,” he said.

According to Allyson Cutright, director of the global oil service division at Rapidan Energy Group, prices may get worse in 2021 before they get better.

“We expect a pullback here shortly, similar to what we saw happen in early September, and that’s primarily because we don’t see the vaccines really impacting demand until the second half of the year,” Cutright told Investors Business Daily.

Rapidan expects Brent to average \$45 per barrel for 2021 and WTI to average \$43.

Cutright said the United States likely would reenter the Iranian nuclear agreement by the middle of 2021.

If sanctions on Iranian crude are lifted, 1.8 million bpd would likely come back to the market.

“So, it’s going to be another rough year, though not as bad as 2020,” she said.

Jet fuel remains the soft spot in demand for transportation fuels.

Industry-wide revenue passenger-kilometers fell by 70.6% year-on-year in October, a modest improvement from the 72.2% decline in September, The International Air Transport Association said in its December 2020 report on the Americas.

“As in the previous months, the gain was driven by domestic markets,” the IATA said.

According to the U.S. Energy Information Administration, jet fuel consumption by U.S. airlines on Thanksgiving 2020 was 42% of the amount consumed on Thanksgiving 2019.

Brent and WTI moved more than 1% higher in early trading Dec. 29 as Petroleum News went to press, Brent up 57 cents to \$51.43, and WTI up 52 cents to \$48.14. ●

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PIKKA PLAN

facilities, pipelines, and drillsite infrastructure.

In its Oct. 30 POD application Oil Search said it plans to make a final investment decision in late 2021 or early 2022 — the POD was followed by a technical review submitted to the division on Dec. 10.

The first phase of Pikka involves just one drill site versus three drill sites per the initial POD.

But in a presentation Dec. 3, Oil Search Alaska COO Matt Elmer updated that information, saying “We hope to get to a final investment decision by the end

of the year.”

If sanctioned by Oil Search and its partner Repsol, Pikka development drilling would begin in 2022. The company told Petroleum News 40-50 wells will be drilled for phase 1.

Division Director Tom Stokes told Elmer in the Dec. 22 decision letter that the POD approval is “only for a general plan of development. Specific field operations require separate approval under 11 AAC 83.346, Unit Plan of Operations.”

Under 11 AAC 83.343, the 2022 POD is due Nov. 2, 90 days before the 2021 POD expires.

—KAY CASHMAN

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ENVIRONMENT & SAFETY

Regulators: Industry didn't cause temblors

A Kansas regulatory agency has determined that the oil and gas industry wasn't to blame for a recent spate of Wichita earthquakes.

The Kansas Corporation Commission looked at wastewater injection wells located within 6 miles of the epicenters of the 15 earthquakes that rattled Wichita in the past month and found that none had recent volume increase, The Wichita Eagle reports.

The agency also found that no new wells were "recently completed within the area."

"Based on our investigation, KCC staff does not believe the seismicity in Wichita, Kansas is tied to any oil and gas activities in the area," Ryan A. Hoffman, the Kansas Corporation Commission director of the conservation division, said Dec. 23 in a news release.

The largest in the series of earthquakes was a 3.7 magnitude Dec. 19, when the Kansas Geological Survey reported five earthquakes. KGS Senior Scientist Rick Miller said the 3.7 magnitude could be the largest in Wichita since 1948.

Miller has said he believes the earthquakes are a natural event on a fault line, letting off built up energy.

—ASSOCIATED PRESS

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FURIE REQUEST

casing stubs 6 feet above the seafloor. (AOGCC records show the Pan American wells — all drilled in the 1960s — were plugged and abandoned within months of their spud dates.)

Furie wells not on NOAA charts

Dusenbery said none of Furie's wells are on NOAA charts and that would need to be remedied. He said the stubs don't present navigational hazards because just the casing remains, no wellhead equipment that could snag.

All three Furie wells are in fairly deep water; two were suspended in 2012 and one in 2013, he said.

"Extreme tides in the Cook Inlet present unique challenges and high risks to any surface or subsea operation," Furie said in

slides presented at the hearing. Furie said "the human safety risk" associated with cutting off the remaining 15 feet of casing stub "is high and not commensurate with the operational outcome."

Bathymetry surveys in the area have found boulders as tall or taller than the casing stubs in the area, the company said.

Furie presented casing cutoff cost estimates for three approaches: \$3.7 million to mobilize a barge and divers and cut the casing off 5 feet below the mudline; \$6.9 million to mobilize a jack-up rig and cut the casing off 5 feet below the mudline; and \$2 million to mobilize a barge and divers and cut the casing off at mudline.

AOGCC records show 10 wells drilled by previous Kitchen Lights owners, three of which, two exploratory wells and one development well, are plugged and abandoned. All three of the currently suspended wells were exploratory.

Comments

The commission heard from the U.S. Coast Guard on the issue of the remaining casing stubs.

"I'd be reluctant to call it a 'hazard to navigation.' On the other hand, a lack of awareness of said structures would be a concern," Lt. Matt Lemanski, waterways management division chief for the U.S. Coast Guard Sector Anchorage, told AOGCC in a Dec. 17 email.

Lemanski said there would need to be a mechanism in place to communicate to NOAA to update the charts showing the protruding subsurface structures.

"After consulting with the Marine Pilots, I could see a situation where a vessel needs to drop an anchor in an emergency, to self-arrest or someone wants to install a new pipeline or subsea cable, or some other event (earthquake) that requires a response." If information on the casing stubs was on the charts, "there will be documentation on file that is relatively easy to access," Lemanski said.

Michael Munger, executive director of the Cook Inlet Regional Citizens Advisory Council, said in a Dec. 21 letter that CIR-CAC believes "if this request for regulatory variance is granted, it may set a disturbing precedent for Cook Inlet and elsewhere in the state where drilling from a mobile drilling unit may occur."

Munger said CIRCAC believes "that seafloor obstructions such as these wells add to navigational risk for large marine vessels in transit. Of particular concern is the potential of an anchor snag in the event of a vessel attempting self-arrest due to loss of steering or propulsion," and said self-arrest has been utilized in the past in Cook Inlet.

CIRCAC also said large boulders move on the inlet seabed due to "extreme tidal fluctuations and associated high currents," and noted the boulder strike on a subsea pipeline which had caused a natural gas leak and required repair.

Bob Shavelson, advocacy director for Cook Inletkeeper, said in a Dec. 22 letter that the commission's regulations require removal of "wellhead equipment, casing, piling, and other obstructions to a depth at least five feet below the midline before removing the drilling rig, unless otherwise approved by the commission as adequate to protect public health and safety," and said "Inletkeeper is unaware whether AOGCC made such findings prior to the removal of the drill rig from the wellheads in question."

As for the historic wells cited by Furie, Inletkeeper said those wells predate the regulation requiring removal to 5 feet below the seafloor.

—KRISTEN NELSON

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