

page August ANS output at 452,270 bpd, down from July, up year-over-year

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Finnex, Mustang Holding make deal to make a deal; A.O. No. 340

SINCE THE ALASKA Industrial Development and Export Authority, or AIDEA, completed a Sept. 23, 2020, nonjudicial foreclosure that granted 90.1% ownership of the Southern Miluveach unit and related loan collateral to Mustang Holding LLC, a wholly owned AIDEA subsidiary, MHLLC has been unit operator, keeping the unit's Mustang project and its assets in a regulatory



compliant cold shut-down status — and continue to provide for the protection of all surface equipment, wellbores, pipelines, roadways, well pads, and any and all related equipment and infrastructure.

The Southern Miluveach unit, or SMU, lies between the Kuparuk River and Colville River units and is adjacent to the Quokka unit on Alaska's North Slope.

At one point MHLLC executed a non-binding term sheet with Finnex LLC to develop and manage the project. Finnex was to be led by Gordon Pospisil who had over 30 years' experience working in the oil industry in the Rockies, Alaska, Canada, and Texas.

see INSIDER page 11

AGDC to collaborate on Cook Inlet ammonia, carbon sequestration plan

The Alaska Gasline Development Corp., Mitsubishi Corp., TOYO Engineering Corp. and Hilcorp Alaska have signed a memorandum of understanding to evaluate the commercial feasibility of using North Slope natural gas delivered to Southcentral to produce carbon-free ammonia.

The goal is to "assess the potential to produce zero-carbon ammonia in the Cook Inlet region of Southcentral Alaska," AGDC said Oct. 4.

Carbon dioxide generated by the process would be captured and sequestered underground. AGDC said the Cook Inlet basin is believed to have "world-class carbon sequestration potential."

"The assessment project will further define Cook Inlet's sequestration potential and the economics for producing clean ammonia alongside LNG in Alaska," the corporation said.

AGDC President Frank Richards discussed what AGDC

see CARBON PLAN page 9

Alaska EV charging station plan approved, releasing federal funds

The U.S. Department of Transportation Federal Highway Administration has approved the state of Alaska's plan for deploying high speed electric vehicle charging stations on Alaska highways, thus releasing federal funding assistance for the charging station implementation, the Alaska Energy Authority announced on Sept. 27. The state anticipates receiving about \$52 million in federal funding over the next five years through the National Electric Vehicle Infrastructure program, a component of the federal Infrastructure Investment and Jobs Act. AEA is working with the Alaska Department of Transportation and Public Facilities on the program.

"Now, the work begins to turn the plan's vision into a reality," said Curtis Thayer, AEA executive director. "We look forward to continuing our efforts with DOT&PF and other agencies and stakeholders to use these federal dollars to build a statewide interconnected EV charging station network, making EV charging infrastructure more accessible and connected for visitors and Alaskans."

see CHARGING STATIONS page 10

FINANCE & ECONOMY

Oil inflection point

OPEC+ slashes 2M bpd from production quotas as risk-on bias juices markets

By STEVE SUTHERLIN

Petroleum News

laska North Slope crude rose \$2.10 Oct. 5 to Close at \$93.88 per barrel, while West Texas Intermediate rose \$1.24 to close at \$87.76 and Brent rose \$1.57 to close at \$93.37.

The gains came after the Organization of the Petroleum Exporting Countries and its allied producing countries announced a 2 million barrel per day oil production cut from the August required production levels for the group, known as OPEC+. The reduction will go into effect in November.

The action was taken "in light of the uncertainty that surrounds the global economic and oil market outlooks, and the need to enhance the long-term

OPEC is incentivized to reduce output because it is the only oil producer in the world with spare capacity, according to Jeff Currie, global head of commodities research at Goldman Sachs.

guidance for the oil market, and in line with the successful approach of being proactive, and preemptive," OPEC said in an Oct. 5 release.

Oct. 4 saw even larger oil price increases as anonymous delegates arriving in Vienna ahead of the Oct. 5 OPEC and non-OPEC Ministerial Meeting told media that a production cut of up to

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EXPLORATION & PRODUCTION

BlueCrest plans drilling

Company has the largest known underdeveloped structure in Cook Inlet

By KAY CASHMAN

Petroleum News

ending receipt of investment funding, BlueCrest Alaska Operating plans to restart its oil and gas drilling program in 2023 after a three-year gap largely due to the pandemic and unstable oil prices. The first well the company will drill is the H10 Trident Fishbone, John M. Martineck, JOHN MARTINECK BlueCrest president and chief operating

officer, told Alaska's Division on Oil and Gas Sept. 27 in the 9th plan of development for the Cosmopolitan unit, which runs from Jan. 1, 2023, to Dec. 31, 2023.

"This well has already been designed and would be ready to spud within several months of receipt of



new funding," Martineck said.

Depending on oil prices and project funding, the plan is to continue to drill more oil and gas wells, Martineck told Petroleum News Oct. 5.

But funding is a major challenge for Cook Inlet basin oil and gas companies.

"The challenge to get financing is largely because of the way the State handled the tax credits," Martineck told PN.

Several Cook Inlet producers went bankrupt in the last few years as a result of the previous gubernatorial administration's delay to pay exploration credits, he said.

"Companies, including BlueCrest, spent millions

see **BLUECREST DRILLING** page 11

EXPLORATION & PRODUCTION

AOGCC OKs propane sales

Prudhoe owners want to look at commercial sales, estimate 200 bpd initially

By KRISTEN NELSON

Petroleum News

n 2012, Prudhoe Bay working interest owners opposed a proposal that the unit sell up to 2,500 barrels per day of propane from the field; earlier this year, they said they were interested in selling a smaller quantity, 200 bpd.

The 2012 proposal was from Harold Heinze, who petitioned the Alaska Oil and Gas Conservation Commission to mandate propane sales of 2,500 bpd from Prudhoe Bay, on the basis that not selling propane was causing waste.

On Aug. 17, 2012, AOGCC, in other order 75, "concluded that not conducting commercial propane sales from the PBU was not causing waste."

In its May 19 application to AOGCC, Hilcorp said that based on its updated analysis of the impact of propane sales, "waste will not occur."

Earlier this year, Hilcorp North Slope, the current Prudhoe Bay unit operator, applied for an amendment to other order 75, requesting an update to document the Prudhoe owners' "current understanding" of impacts on the field "in the event of propane sales."

In its May 19 application to AOGCC, Hilcorp

see PROPANE SALES page 10

GOVERNMENT

AOGCC schedules hearing on Meltwater P&A

ConocoPhillips' proposal to plug and abandon Drillsite 2P wells would require exceptions to the commission's P&A regulations

By KRISTEN NELSON

Petroleum News

The Alaska Oil and Gas Conservation Commission has scheduled a public hearing on ConocoPhillips Alaska's plans for abandonment of wells at the Kuparuk River unit Drillsite 2P, Meltwater.

The company included plans to shut-in the Meltwater participating area in 2021 when it filed a plan of development for Kuparuk in June 2021.

Meltwater is a non-contiguous participating area south, southwest of the Kuparuk River unit.

The division approved suspension of operations at Meltwater in July 2021, and said ConocoPhillips sought "authorization to plug and abandon 19 wells and suspend surface activities of surface infrastructure" at DS-29. The company told the division that 16 of the wells were active, nine producers and seven injectors (see story in Aug. 8, 2021, issue of PN).

The company told the division that back-out issues at Central Processing Facility 2 were estimated to cost some 600 barrels per day of production due to water cycling requirements to keep the Meltwater crude oil pipeline warm.

In a public notice posted Oct. 3, AOGCC said ConocoPhillips presented plans to abandon DS-2S in

"Additionally, CPAI must demonstrate that the abandonment of DS-2P does not result in waste of the resource."

November 2021 and in July 2022.

"Based on analysis presented by CPAI," AOGCC said in the notice, "DS-2P production backout resulted from hydraulics, facility constraints and water injection, the net production from producing DS-2P was uneconomic for CPAI to produce."

The commission said ConocoPhillips proposed to plug and abandon all 19 wells on DS-2P "by setting three cement plugs in each well: one in the OA, one across the reservoir section, and one across the tubing and inner annulus." AOGCC said it "questions the adequacy of setting a cement plug in the OA via a down squeeze method as it may not adequately confine hydrocarbon-bearing intervals and the placement and quality of the cement plug cannot be verified."

The commission said the company's proposal requires waivers from its regulations on well plugging.

"Due to concern regarding loss of confinement and in the interest of the public, a public hearing is required for the AOGCC to consider waivers from" its regulations, AOGCC said.

"Additionally, CPAI must demonstrate that the abandonment of DS-2P does not result in waste of the resource."

Discovered in 2000

Meltwater was discovered in 2000, ConocoPhillips said in its 2018 Kuparuk unit POD. Development began in 2001 and was completed in 2004 following two phases of development drilling.

Production began in November 2001. AOGCC data for August 2021, the last month in which the PA was in production for an entire month, was 7,730 barrels, some 250 barrels per day. Cumulative production from the field is some 20.28 million barrels.

The division said surface infrastructure — wellhouses, wellheads, chokes, valves, the corrosion injection skid and well-test equipment — may be repurposed at other drill sites.

Surface lines on the pad and the 24-inch produced oil line from DS-2P to DS-2N will be blocked off, the division said, noting this "will include pigging and may include multiple chemical injections into the lines to ensure the lines are cleared."

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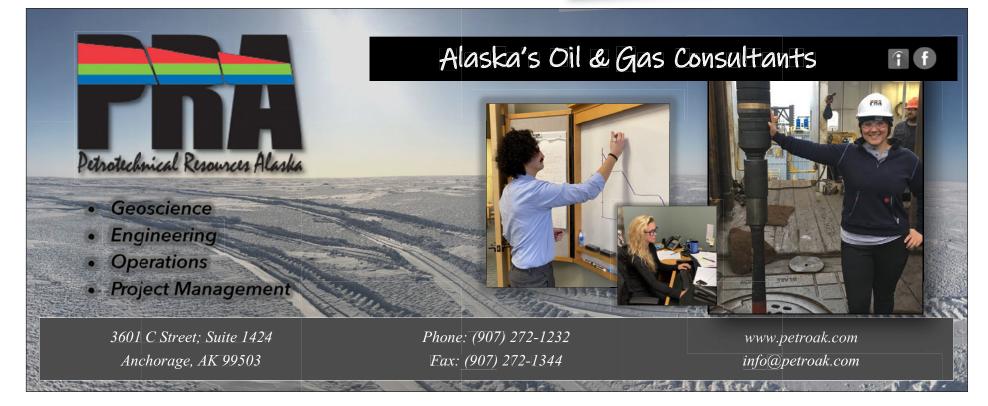
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EXPLORATION & PRODUCTION

August ANS production down 4.3% from July

Average 452,270 bpd, down 20,211 bpd from July, led by 13.7% Kuparuk drop on 10-day TAR; Cook Inlet down marginally at 9,950 bpd

By KRISTEN NELSON

Petroleum News

Alaska North Slope production, crude and natural gas liquids combined, averaged 452,270 barrels per day in August, down 20,211 bpd, 4.3%, from a July average of 472,481 bpd but up 1.1% from an August 2021 average of 447,204 bpd.

The drop was led by the ConocoPhillips Alaska-operated Kuparuk River unit, where a planned 10-day turnaround, or TAR, started Aug. 10. The TAR, involving valve and pipeline replacements at Kuparuk's Central Processing Facility 2, required a shutdown to complete. ConocoPhillips' Colville River unit, with a 7-day TAR beginning at the unit's Alpine facilities Aug. 26, also saw a month-over-month decline.

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

ANS crude averaged 403,313 bpd in August, 89.2% of production, down 18,459 bpd, 4.4%, from a July average of 421,772 bpd and up 0.8% from an August 2021 average of 400,051 bpd. Natural gas liquids averaged 48,957 bpd in August, 10.8% of ANS production, down 1,752 bpd, 3.5%, from a July average of 50,709 bpd and up 3.8% from an August 2021 average of 47,153 bpd.

Month-over-month gains

Hilcorp Alaska-operated Endicott, the Duck Island unit, averaged 7,002 bpd, combined crude and NGLs, up 2,566 bpd, 57.9%, from a July average of 4,435 bpd and up 49.7% from an August 2021 average of 4,676 bpd. Endicott crude averaged 6,112 bpd, 87.3% of the field's production, up 2,158 bpd, 54.6%, from a July average of 3,954 bd and up 44.5% from an August 2021 average of 4,231 bpd. Endicott NGLs, 12.7% of the field's production, averaged 890 bpd in August, up 408 bpd, 84.8%, from a July average of 381 bpd and up 99.8% from an August 2021 average of 445 bpd.

The only other North Slope field with a month-overmonth production increase was Eni's Oooguruk, which averaged 6,303 bpd in August, up 290 bpd, 4.8%, from a July average of 6,013 bpd and up 8.5% from an August 2021 average of 5,812 bpd.

Month-over-month declines on TARs

The ConocoPhillips-operated Kuparuk River unit and ConocoPhillips' Colville River unit both had month-over-month declines, coinciding with a 10-day TAR at Kuparuk and the beginning of a 7-day TAR at Colville River.

Kuparuk averaged 70,331 bpd in August, down 13.7%, 11,158 bpd, from a July average of 81,489 bpd and down 20.7% from an August 2021 average of 88,652 bpd.

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

ConocoPhillips' Colville River unit produces from the main Alpine pool and also from the Nanuq and Qannik

oil pools. It averaged 27,407 bpd in August, down 6,967 bpd, 20.3%, from a July average of 34,374 bpd, up 25.2% from an August 2021 average of 36,661 bpd.

Northstar, Prudhoe Bay

Hilcorp Alaska's Northstar averaged 4,955 bpd in August, down 1,949 bpd, 28.2%, from a July average of 6,903 bpd and down 36.6% from an August 2021 average of 7,817 bpd. Crude oil from Northstar, 61.4% of field production, averaged 3,042 bpd in August, down 774 bd, 20.3%, from a July average of 3,816 bpd and down 34.4% from an August 2021 average of 4,635 bpd. Northstar NGLs averaged 1,913 bpd in August, 38.6% of field production, down 1,175 bpd, 38.1%, from a July average of 3,088 bpd and down 39.9% from an August 2021 average of 3,182 bpd.

The Hilcorp North Slope-operated Prudhoe Bay unit, the Slope's largest producer, averaged 255,457 bpd in August, down 1,086 bpd, 0.4%, from a July average of 256,543 bpd but up 3.8% from an August 2021 average of 245,985 bpd. Prudhoe crude averaged 209,302 bpd in August, 81.9% of production, down 101 bpd, 0.1%, from a July average of 209,403 bpd but up 3.4% from an August 2021 average of 202,459 bpd. Prudhoe NGLs averaged 46,155 bpd, 18.1% of production, down 985 bpd, 2.1%, from a July average of 47,140 bd but up 6% from an August 2021 average of 43,526 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.

Others with declines

Hilcorp Alaska's Milne Point averaged 37,463 bpd in August, down 858 bpd, 2.2%, from a July average of 38,321 bpd but up 1.1% from an August 2021 average of 37,062 bpd.

The Hilcorp-operated Point Thomson field averaged 8,467 bpd in August, down 676 bpd, 11.6%, from a July average of 9,143 bpd and down 11.6% from an August 2021 average of 9,575 bpd.

Eni's Nikaitchuq averaged 17,525 bpd in August, down 149 bpd, 0.9%, from an August average of 17,675 bpd but up 95.8% from an August 2021 average of 8,951 bpd.

Savant's Badami averaged 500 bpd in August, down 133 bpd, 21%, from a July average of 632 bpd and down 53.1% from an August 2021 average of 1,065 bpd. Savant is a Glacier Oil and Gas company.

ConocoPhillips' Greater Mooses Tooth in the National Petroleum Reserve-Alaska averaged 16,862 bpd in August, down 90 bpd, 0.5%, from a July average of 16,952 bpd but up 1,680.6% from an August 2021 average of 947 bpd. The field produces from two drill sites, and the second, GMT2, came online in December 2021. In August, GMT2 averaged 15,617 bpd, 93% of GMT production, while GMT1 averaged 1,245 bpd, 7%. They produce from different oil pools, GMT1 from Lockout

see ANS OUTPUT page 5

Cook Inlet gas up 6.8% from July

Cook Inlet natural gas production averaged 199,606 thousand cubic feet per day in August, up 12,684 mcf per day, 6.8%, from a July average of 186,922 mcf per day and up 6.5% from an August 2021 average of 187,410 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.

Large fields dominate, with seven of the 24 fields producing gas in August accounting for 81.1%, averaging 161,857 mcf per day.

The Hilcorp Alaska-operated Beluga River field (Chugach Electric Association is the majority working interest owner) averaged 34,411 mcf per day in August, 17.2% of inlet production, up 17,483 mcf per day, 103.3%, from a July average of 16,928 mcf per day and up 50.2% from an August 2021 average of 22,917 mcf per day.

Hilcorp's North Cook Inlet averaged 32,612 mcf per day in August, 16.3% of inlet production, up 10,102 mcf per day, 44.9%, from a July average of 22,510 mcf per day and up 61.5% from an August 2021 average of 20,191 mcf per day.

Hilcorp's Ninilchik averaged 26,955 mcf per day in August, 13.5% of inlet production, down 4,948 mcf per day, 15.5%, from a July average of 31,903 mcf per day and down 8.9% from an August 2021 average of 29,590 mcf per day.

Hilcorp's Kenai field averaged 24,645 mcf per day in August, 12.4% of inlet production, down 1,947 mcf per day, 7.3%, from a July average of 26,593 mcf per day and down 19.7% from an August 2021 average of 30,688 mcf per day.

Hilcorp's McArthur River averaged 17,684 mcf per day in August, 8.9% of inlet production, down 321 mcf per day, 1.8%, from a July average of 18,006 mcf per day and down 17.4% from an August 2021 average of 21,407 mcf per day.

Hilcorp's Beaver Creek averaged 13,220 mcf per day in August, 6.6% of inlet production, up 373 mcf per day, 2.9%, from a July average of 12,847 mcf per day and up 61.2% from an August 2021 average of 8,202 mcf per day.

Furie's Kitchen Lights averaged 12,329 mcf per day in August, 6.2% of inlet production, down 1,616 mcf per day, 11.6%, from a July average of 13,946 mcf per day but up 9.3% from an August 2021 average of 11,285 mcf per day.

The remaining fields combined accounted for 18.9% of inlet production in August.

Hilcorp's Ivan River averaged 7,965 mcf per day

see INLET GAS page 5



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At stake is the question of

which water bodies should be

regulated federally by the

Environmental Protection

Agency, and which should be

under state jurisdiction.

EXPLORATION & PRODUCTION

US rotary rig count up by 1 to 765

The Baker Hughes' U.S. rotary drilling rig count was 765 on Sept. 30, up by one from the previous week and up 237 from 528 a year ago.

When the count dropped to 244 more than two years ago, in mid-August 2020, it was the lowest the domestic rotary rig count had 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 2020 when it gained back 10 rigs.

The Sept. 30 count includes 604 rigs targeting oil, up by two from the previous week and up 176 from 428 a year ago, with 159 rigs targeting natural gas, down by one from the previous week and up 60 from 99 a year ago, and two miscellaneous rigs, unchanged from the previous week and up by one from a year ago.

Forty-six of the rigs reported Sept. 30 were drilling directional wells, 696 were drilling horizontal wells and 23 were drilling vertical wells.

The rig count in West Virginia (16) was up by four from the previous week.

The New Mexico rig count (113) was up by two and the North Dakota count (38) was up by a single rig.

The Texas rig count (360) was down by two week-over-week.

Ohio (10), Oklahoma (64) and Pennsylvania (23) were each down a single rig from

Rig counts in other states were unchanged from the previous week: Alaska (10), California (7), Colorado (21), Louisiana (66), Utah (13) and Wyoming (20).

Baker Hughes shows Alaska with 10 rotary rigs active Sept. 30, unchanged from the previous week and up by five from a year ago, when the state's rig count stood at five. Nine of the rigs in Alaska were onshore and one was offshore, unchanged from the pre-

The rig count in the Permian, the most active basin in the country, was unchanged from the previous week at 344 and up by 81 from 263 a year ago.

—KRISTEN NELSON

GOVERNMENT

Court hears WOTUS oral arguments

The U.S. Supreme Court has heard oral arguments in its review of a legal case involving the definition of the waters of the United States, or WOTUS. At stake is the question of which water bodies should be regulated federally by the Environmental Protection Agency, and which should be under state jurisdiction.

The case is of high importance in Alaska, given the myriad of waterways and wetlands in the state. Planned activities that impact federal waters require federal permits that can also trigger environmental reviews under the National Environmental Policy Act.

While traditional waterways that can support interstate commerce clearly are part of WOTUS, what about other waterways

and wetlands that can potentially move pollutants into these navigable waters? This difficult question has been a source of confusion for many years — a previous Supreme Court review of the problem in 2006 resulted in a split decision that perpetuated the confusion.

The legal case now under review by the Supreme Court results from the decision in 2004 by a couple in Idaho to build a house on wet ground near a lake. After the couple had filled the building lot with sand and gravel, in preparation for construction, the Environmental Protection Agency, claiming that the construction site included WOTUS wetlands, ordered the couple to restore the building site to its original condition. In 2008 the couple sued the EPA in the Idaho District Court. After the District Court found in favor of the EPA, the case was appealed to the 9th Circuit. Then, after the 9th Circuit upheld the District Court decision, the case was appealed to the Supreme Court.

The question now is whether the Supreme Court will take an expansive view of WOTUS and, thus, include wetlands with somewhat distant links to unambiguous WOTUS water bodies. Or will the court rein in the definition, restricting the WOTUS definition to less contentious water systems.

—ALAN BAILEY



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MELTWATER HEARING

Commission hearing

The AOGCC public hearing on ConocoPhillips' DS-2P plugging and abandonment plan is Dec. 8 at 10 a.m. at the commission's Anchorage offices.

Audio call-in information is 907-202-7104 conference ID 257 623 39#.

Written comments may be submitted to the commission at 303 W. 7th Ave.,

99501 Anchorage, AK or samantha.carlisle@alaska.gov, and must be received no later than the conclusion of the Dec. 8 hearing.

In a presumably related matter, AOGCC has a request for proposals out, published Sept. 30, for letters of interest and qualifications for a cement evaluation specialist to provide as-needed expert advice to the commission.

> Contact Kristen Nelson at knelson@petroleumnews.com



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ANS OUTPUT

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Cook Inlet

Cook Inlet production averaged 9,950 bpd in August, up 39 bpd, 0.4%, from a July average of 9,910 bpd and up 17.6% from an August 2021 average of 8,464 bpd. Crude accounts for 98.9% of Cook Inlet production, with Swanson River NGLs accounting for 1.1%.

Hilcorp Alaska's McArthur River averaged 2,915 bpd in August, up 66 bpd, 2.3%, from a July average of 2,850 bpd but down 9.6% from an August 2021 average of 3,224 bpd.

Hilcorp's Granite Point averaged 2,362 bpd in August, down 38 bpd, 1.6%, from a July average of 2,400 bpd and down 11% from an August 2021 average of 2,654 bpd.

Cook Inlet Energy's Redoubt Shoal averaged 1,153 bpd in August, up 202 bpd, 21.2%, from a July average of 951 bpd. The field was not in production in August 2021. CIE is a Glacier Oil and Gas company.

Hilcorp's Trading Bay averaged 945 bpd in August, down 37 bpd, 3.8%, from a July average of 983 bpd and up 459% from an August 2021 average of 169 bpd.

Hilcorp's Swanson River averaged 790 bpd in August (113 NGLs, 678 crude), down 10 bpd, 1.3%, from a July average of 801 bpd and down 12.9% from an August 2021 average of 907 bpd.

BlueCrest's Hansen field, the Cosmopolitan unit, averaged 760 bpd in August, down 3 bpd, 0.5%, from a July average of 763 bpd and down 13.2% from an August 2021 average of 875 bpd.

Hilcorp's Beaver Creek averaged 708 bpd in August, down 84 bpd, 10.6%, from a July average of 792 bpd but up 11.8% from an August 2021 average of 633 bpd.

CIE's West McArthur River averaged 316 bpd in August, down 55 bpd, 14.9%, from a July average of 371 bpd. The field was not in production in August 2021. CIE is a Glacier Oil and Gas company.

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

Contact Kristen Nelson at knelson@petroleumnews.com continued from page 3

INLET GAS

in August, down 4,188 mcf per day, 34.5%, from a July average of 12,153 mcf per day but up 33.2% from an August 2021 average of 5,980 mcf per day.

Hilcorp's Cannery Loop averaged 6,227 mcf per day in August, down 294 mcf per day, 4.5%, from a July average of 6,521 mcf per day but up 64.1% from an August 2021 average of 3,795 mcf per day.

Hilcorp's Swanson River averaged 5,835 mcf per day in August, down 2,197 mcf per day, 27.4%, from a July average of 8,032 mcf per day and down 63% from an August 2021 average of 15,770 mcf per day.

AIX's Kenai Loop averaged 3,540 mcf per day in August, up 345 mcf per day, 10.8%, from a July average of 3,196 mcf per day and up 125.9% from an August 2021 average of 1,567 mcf per day.

Hilcorp's Granite Point averaged 3,470 mcf per day in August, down 37 mcf per day, 1.1%, from a July average of 3,507 mcf per day and down 5.9% from an August 2021 average of 3,689 mcf per day.

Hilcorp's Deep Creek averaged 3,165 mcf per day in August, down 67 mcf per

day, 2.1%, from a July average of 3,233 mcf per day and down 19.5% from an August 2021 average of 3,933 mcf per day.

Vision Operating's North Fork averaged 2,961 mcf per day in August, down 29 mcf per day, 1%, from a July average of 2,989 mcf per day and down 5.6% from an August 2021 average of 3,135 mcf per day.

BlueCrest's Hansen averaged 1,655 mcf per day in August, up 237 mcf per day, 16.7%, from a July average of 1,418 mcf per day but down 30.5% from an August 2021 average of 2,381 mcf per day.

Hilcorp's Trading Bay averaged 1,175 mcf per day in August, down 67 mcf per day, 5.4%, from a July average of 1,242 mcf per day but up 301.2% from an August 2021 average of 293 mcf per day.

Hilcorp's Lewis River averaged 650 mcf per day in August, down 32 mcf per day, 4.7%, from a July average of 683 mcf per day and down 42.2% from an August 2021 average of 1,126 mcf per day.

Amaroq's Nicolai Creek averaged 400 mcf per day in August, up 15 mcf per day, 3.9%, from a July average of 385 mcf per day but down 24.6% from an August 2021 average of 530 mcf per day.

Hilcorp's Nikolaevsk averaged 277

mcf per day in August, up 6 mcf per day, 2.4%, from a July average of 271 mcf per day but down 16.3% from an August 2021 average of 331 mcf per day.

Cook Inlet Energy's Redoubt Shoal averaged 250 mcf per day in August, up 10 mcf per day, 4.1%, from a July average of 240 mcf per day. The field was not on production last August. CIE is a Glacier Oil and Gas company.

Hilcorp's Seaview averaged 106 mcf per day in August, down 131 mcf per day, 55.2%, from a July average of 238 mcf per day and down 82.3% from an August 2021 average of 600 mcf per day.

CIE's West McArthur River averaged 63 mcf per day in August, down 21 mcf per day, 25.2%, from a July average of 84 mcf per day. The field was not on production last August.

Hilcorp's Pretty Creek, which produces only sporadically, averaged 9 mcf per day in August. The field was not on production in July, or in August last year.

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

—KRISTEN NELSON

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PRODUCERS PREVIEW

ConocoPhillips Alaska's largest producer

From Producers magazine: As it continues to reduce its environmental footprint, the big independent increases output

By KAY CASHMAN

Petroleum News

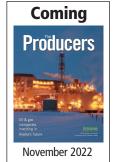
onocoPhillips Alaska Inc., or CPAI, is Alaska's largest oil producer. With a history of more than 60 years in the state, the Alaska unit of the Houston-based independent has diligently pushed westward beyond Prudhoe Bay.

Going east to west on Alaska's North Slope, CPAI has four Central Processing Facilities: CPF 1-2-3 in the Kuparuk River Unit and the Alpine Central Facility in the Colville River Unit.

Kuparuk River has 48 drill sites with

active wells flowing through CPF-1, CPF-2 or CPF-3.

The Colville River Unit has five drill sites — CD1-2-3-4-5. Those five drill sites and the Greater Mooses Tooth Unit drill sites MT6 and MT7 flow through the Alpine Central Facility.



All are operated by CPAI.

The company also owns approximately a 36% working interest in the Prudhoe Bay Unit, which is operated by Hilcorp North Slope LLC.

"Through the coming decade, we anticipate making significant capital investments at Colville River Unit, GMT Unit, Kuparuk River Unit, and Prudhoe Bay Unit which should enable gross production from these four units to grow and exceed 450,000 barrels of oil per day," CPAI media director Rebecca Boys told Petroleum News in an early September 2022 email.

What's new

In response to a query from Petroleum News about what was new in CPAI-operated North Slope fields, including what new production was expected to feed into their processing facilities in the next year or two, Boys said in the Kuparuk River Unit the Nuna and Coyote projects will be developed from drill sites 3S and 3T.

Also in Kuparuk, the Eastern NEWS, or North East West Sak, project, which will be developed in the CPF-1 area, will be a "continuation of our successful West Sak 1H NEWS development."

In the Colville River unit, "there are the Narwhal (Nanushuk) projects with

CPAI July 2022 production

The Kuparuk River field averaged 81,489 bpd of oil in July 2022, up 2,394 bpd, 3%, from a June average of 79,095 bpd and down 8.6% from a July 2021 average of 89,170 bpd.

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

CPAI's Colville River Unit averaged 34,374 bpd in July, down 530 bpd, 1.5%, from a June average of 34,904 bpd and up 222.7% from a July 2021 average of 10 651 bpd

There was a 26-day maintenance turnaround at the field in 2021 from July 9 through Aug. 3. In July 2022, wells at CD1 began to come back online following a shutdown at that pad which began in March following discovery of a natural gas release.

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

CPAI's Greater Mooses Tooth in the National Petroleum Reserve-Alaska averaged 16,952 bpd of oil in July, down 2,047 bpd, 10.8%, from a June average of 18,999 bpd and up 2,409.8% from a July 2021 average of 675 bpd.

In July 2021 the field was producing from just one pad, GMT1, the Lookout oil pool. ConocoPhillips began sustained production from GMT2 at the Rendezvous oil pool on Dec. 12. GMT2 currently accounts for 90% of GMT production.

All of the oil mentioned in this story is shipped to market via the 800-mile trans-Alaska oil pipeline.

—KAY CASHMAN

CD4 expansion and the new CD8 drill site. And of course, continuation of ERD drilling at CD2 targeting the Fiord West reservoir," she said, something that Petroleum News sources say is expected by the end



is EREC ISAACSON

"In addition, there will be continued coil tubing and rotary development drilling across these assets," Boys said.

Fiord West ERD

of the year.

In a May 18, 2022, update of an April 11 annual update to federal and state officials on the 24th Colville River Unit plan of development, CPAI said it had achieved first oil at the Fiord West satellite. The well, CD2-310, was a record-setting horizontal well drilled into the Kuparuk formation by Doyon Rig 26. The well was drilled to a total measured depth of 35,526 feet making it the longest North American land based well.

Given the "significant challenges seen" in the well that led to delays, the company said its "drilling plans for 2022



RYAN LANCE

had been updated to include a drilling break" for Doyon Rig 26 to be able to "improve ERD drilling operations."

The extended reach drilling rig, also known as the "Beast" because of its immense size,

had started drilling the Fiord West CD2-310 well in second quarter 2021; it wasn't finished until May 2022. The technologically advanced rig is capable of drilling in excess of 40,000 feet.

"This break in the ERD program," CPAI said, "will be used to incorporate the lessons learned from CD2-310 execution and make required engineering changes to the ERD well designs going forward."

While the well might not have been completed on time, it exceeded CPAI expectations in terms of output.

On May 20, 2022, CPAI said the well's flowrate was "being progressively increased and producing close to 10,000 barrels of oil per day, exceeding expectations."

On June 1, 2022, CPAI told Petroleum News that the company's Fiord West CD2-310 well had been "flowing steady" at 11,500 barrels of oil per day.

"The well choke is now fully open. A high rate was reached on May 25" of 12,000 barrels of oil per day, CPAI said in an email.

Initially, CPAI hoped to produce some 20,000 barrels of oil per day from the satellite, but that was from several wells.

At that time the company said the well will be "pre-produced for 5-6 months prior to being converted to permanent injection service." (CD2-310 was initially planned to be a development well, but its status was later changed by CPAI to that of an injector.)

Petroleum News sources said in mid-September 2022 that the Doyon 26 ERD rig was still in "warm stack" but remains under contract to CPAI. Expectations are that Rig 26 will start up again near the end of 2022.

The Colville River Unit is in both state of Alaska land and in federal land.

Narwhal PA, CD8

Also in the Colville River Unit is the Narwhal Participating Area, covering some 3,360 acres, where sustained oil production began Dec. 14, 2021.

The Narwhal PA encompasses an area on the southeast edge of the unit where CPAI drilled the Putu 2 and Putu 2A wells. It is adjacent to the Pikka unit, where Santos subsidiary Oil Search (Alaska) and Repsol are working to develop the Nanushuk formation.

The company announced the Narwhal discovery based on the Putu wells, estimating between 100 million and 350 million barrels of oil equivalent.

Willow (in the National Petroleum Reserve-Alaska) and Narwhal are different sediment deposits within the Nanushuk formation, with Willow being older.

In its PA approval the division said the Narwhal sands "are broadly age equivalent to the Late Cretaceous Nanushuk Group." CPAI proposed defining the Narwhal reservoir as the accumulation that correlates with that found in the Oil Search (Alaska) Qugruk 3 well from 4,192 to 5,152 feet measured depth.

"The Narwhal sands extend for approximately 30 miles long by 3 miles wide," the division said.

Planning for development of a new drill site called CD8 will continue during 2022. This new drill site will develop the Narwhal reservoir in the Fifth Expansion area of the Colville River unit.

The company plans to drill one new Narwhal PA well by May 15, 2023.

Nuna and Coyote

Per Boys' early September 2022 email, in the Kuparuk River Unit the Nuna and Coyote projects will be developed from drill sites 3S and 3T.

Here are some of the things CPAI

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PRODUCERS PREVIEW

executives have said, or CPAI state filings have revealed, about the Coyote and Nuna prospects.

- In 2015-16 the company drilled the Torok reservoir at Drill Site 3S (Nuna), drilling a well pair and contacting more than 4,000 feet of reservoir in a single lateral.
- Among CPAI's "notable activities" completed within the Kuparuk participating area in 2021 was the completion of a well sidetrack into the "Brookian-age Coyote reservoir" from DS-3S. (Coyote had been identified from review of 2015 3D seismic.)
- In mid-2021, CPAI announced the Coyote discovery east of Nuna. At the time, company President Erec Isaacson said Coyote was in the Brookian topset above the Nuna Torok discovery, describing Coyote as shallow.
- In late 2021 and 2022 CPAI officials said that the primary Greater Kuparuk Area development projects included Coyote, Nuna and North East West Sak, also referred to as Eastern NEWS.
- Regarding the status of Nuna, the company told Petroleum News on May 4, 2022: "We continue to progress the project planning and approvals for the development at 3T, a planned future drill site where we plan to locate the Nuna development. It will be sited on the existing gravel pad within the Nuna acreage we acquired from Caelus. We plan to drill some wells in the same reservoir in the 3S area in Q3 2022 that will provide key learnings to help us further optimize the 3T development plans."
- Also on May 4, 2022, a CPAI spokesperson told Petroleum News that well test results from the Coyote prospect were "very successful," exceeding CPAI expectations and "providing key data to help us better understand the Coyote reservoir interval."

In CPAI's 2022 Kuparuk River Unit 2022 plan of development, which was approved in July 2022 and runs from Aug. 1, 2022, through July 31, 2023, the company said rotary drilling was planned to resume in the third quarter of 2022 with an injector-producer pair in the Torok (Moraine) reservoir (Nuna).

In addition to the completion of a well sidetrack into the Brookian-age Coyote reservoir from DS-3S, CPAI said it further continued to monitor the two existing Torok (Moraine) horizontal producer/injector well pairs at DS-3S, to determine long-term deliverability and waterflood performance of the reservoir.

Also, CPAI intends to apply for a separate participating area for the Torok (Moraine) reservoir ahead of the 2023 Kuparuk River Unit POD submission.

In addition to the Torok (Moraine) wells, CPAI also plans to pursue a well pair within the Coyote reservoir and an additional Kuparuk target during the 2022 POD period.

Pilot EOR at Coyote

On Aug. 11, 2022, CPAI applied to the

Alaska Oil and Gas Conservation Commission for approval of a pilot enhanced oil recovery project for the Coyote interval in the Kuparuk River unit.

In its application the company said since the feasibility of injection into the reservoir had not been established, this is considered a pilot project that "will aid in determining the commercial viability of developing Coyote as an enhanced oil recovery project."

The area is in the vicinity of DS 3S at Kuparuk, and includes an adjacent lease, ADL 392374, which is held by the Kuparuk working interest owners but is not currently in the unit.

"The 3S-24B exploration well was drilled to understand the ability to produce from the Coyote interval," the company told AOGCC. A horizontal producer-injector well pair is planned for the fourth quarter of this year with injection beginning about the first quarter of 2023.

The development design for Coyote is expected to be a line-drive water alternating gas flood with horizontal producers and injectors, the company said, with results from the pilot indicating whether that is the optimal development concept.

"If a commercially viable discovery is established and the development is sanctioned, then CPAI would apply at that time to the AOGCC to establish pool rules and an area injection order," the company said.

CPAI told AOGCC in its application that the first injector will be 3S-701 and be 1,000 to 3,000 feet southwest of the planned production well, the 3S-704, with optimum spacing for development of the reservoir still under analysis.

"Completion of the 3S-701 injection well will allow interference and injection testing of the Coyote reservoir to help establish the optimal pattern spacing and potentially support commerciality of the reservoir," the company said.

A second injection well may be drilled, depending on the outcome of the first injector and its testing, to continue "this long-term injection and production test with a fully supported producer centered pattern centered around the 3S-704."

The company is requesting a 3-year duration for the pilot to allow time for drilling, testing injector performance, analyzing results of the first injector and potentially drilling, testing and observing and analyzing results of a second injector.

Logs from the Palm 1 well — with a bottomhole immediately west of DS-3S — were used to define the "gross Coyote reservoir interval" at a measured depth range of 4,270 to 5,115 feet, the company said.

"The Late Cretaceous Coyote reservoir is a thinly bedded, shallow marine, west to east progradational system within the Nanushuk formation," ConocoPhillips said, with a thickness of approximately 650 feet in the DS-3S area.

"The interval has been penetrated by numerous wells targeting deeper stratigraphic intervals, both from Drill Site 3S, and vertical off-ice exploration wells in and surrounding the Kuparuk River Unit."

The DS-3S is currently on produced water service, but that could change, and part of the purpose of the pilot is to confirm compatibility, the company said, listing primary injection fluids as:

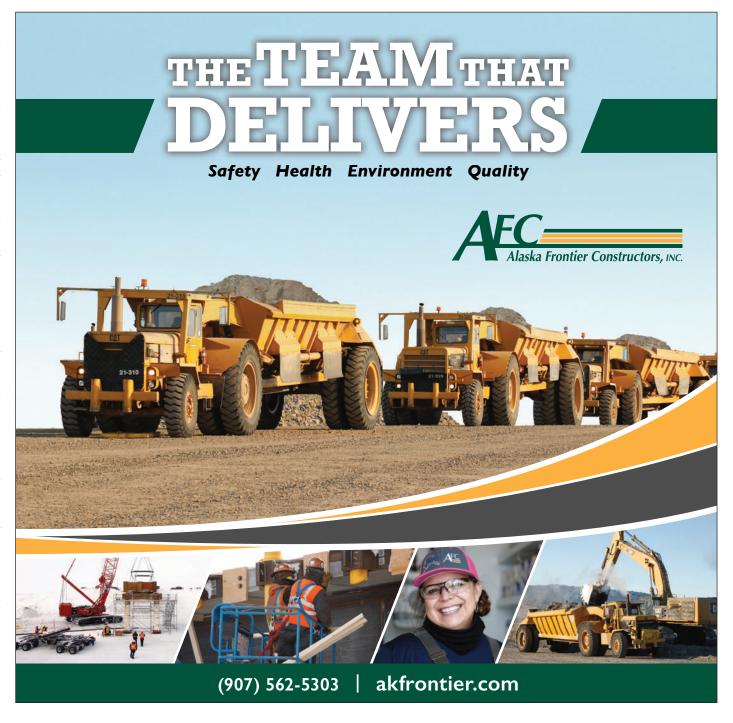
•Produced water and gas from oil pools within the Kuparuk River unit;

•Beaufort seawater from the Kuparuk seawater treatment plant; and

•Enriched hydrocarbon gas — a blend of KRU lean gas with indigenous and/or imported natural gas liquids.

CPAI said the proposed Coyote enhanced recovery injection order area is within the scope of an existing aquifer exemption, as the lease not currently in the Kuparuk River Unit was part of the unit in 1984 when the Environmental Protection Agency adopted the aquifer

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exemption and in 1986 when AOGCC incorporated the EPA aquifer exemption.

"Initial reservoir modeling and simulation estimate a primary depletion recovery factor of 5-10%, a cumulative recovery factor from waterflood operations between 20-30%, and an incremental 1-5% recovery for enriched gas injection (EWAG)," CPAI said.

Willow on hold

When the U.S. Bureau of Land Management issued a draft supplemental environmental impact statement for CPAI's Willow project in the National Petroleum Reserve-Alaska, the agency added Alternative E.

The company told Petroleum News in a July 2022 email that the new alternative was in response to an order from the U.S. District Court for Alaska.

BLM said in the draft SEIS that Alternative E is intended to reduce surface infrastructure in the Teshekpuk Lake Special Area and reduce impacts to yellow-billed loon nests near the original proposed location for the Bear Tooth 5 drill site — Willow is in the Bear Teeth unit in NPR-A.

In the company's second quarter earnings call on Aug. 4, 2022, Chairman and CEO Ryan Lance said ConocoPhillips looks forward to a record of decision on Willow later this year "so we can move forward on the project. We think we've satisfied all the concerns that the federal judge has had, and we're ready to move forward."

Nick Olds, ConocoPhillips' senior vice president, strategy and technology, called publication by BLM of the draft SEIS on July 8 "a key milestone," but said the



Doyon 26, also known as the "Beast," at Fiord West satellite.

company wouldn't make a final investment decision until BLM publishes a final SEIS and there is "a supportive record of decision by the BLM." That, he said, would allow ConocoPhillips to move forward with Willow construction.

As to when FID might occur, "we would probably see that at the earliest later this year and more likely early next," Olds said.

He said a winter 2022-23 construction season would occur "assuming we had a very favorable record of decision," allowing the company "to do civil construction and start putting roads in place for the project."

Olds said ConocoPhillips continues to do detailed engineering "to refine cost and schedule, as well as the final development modifications." Modifications are necessary, he said, because of Alternative E, which responds to the court order. "And that is to minimize or reduce the surface impact on the Teshekpuk Lake Special Area. So that alternative, we think, is a good path forward."

Olds said Alternative E "reduces the surface infrastructure and still maintains the estimated recoverable resources that we communicated in the market update of about 600 million barrels," 180,000 barrels per day gross before royalty.

ConocoPhillips remains committed to Willow, which "remains competitive in the portfolio," and continues to have, he said, "very strong stakeholder support, including the Alaska congressional delegation, the trades, and unions."

Congressional delegation urges BLM

On Sept. 20, 2022, U.S. Senators Dan Sullivan, Lisa Murkowski (both R-Alaska) and Representative Mary Sattler Peltola (D-Alaska), sent a letter to Secretary of the Interior Deb Haaland urging BLM to complete the permitting

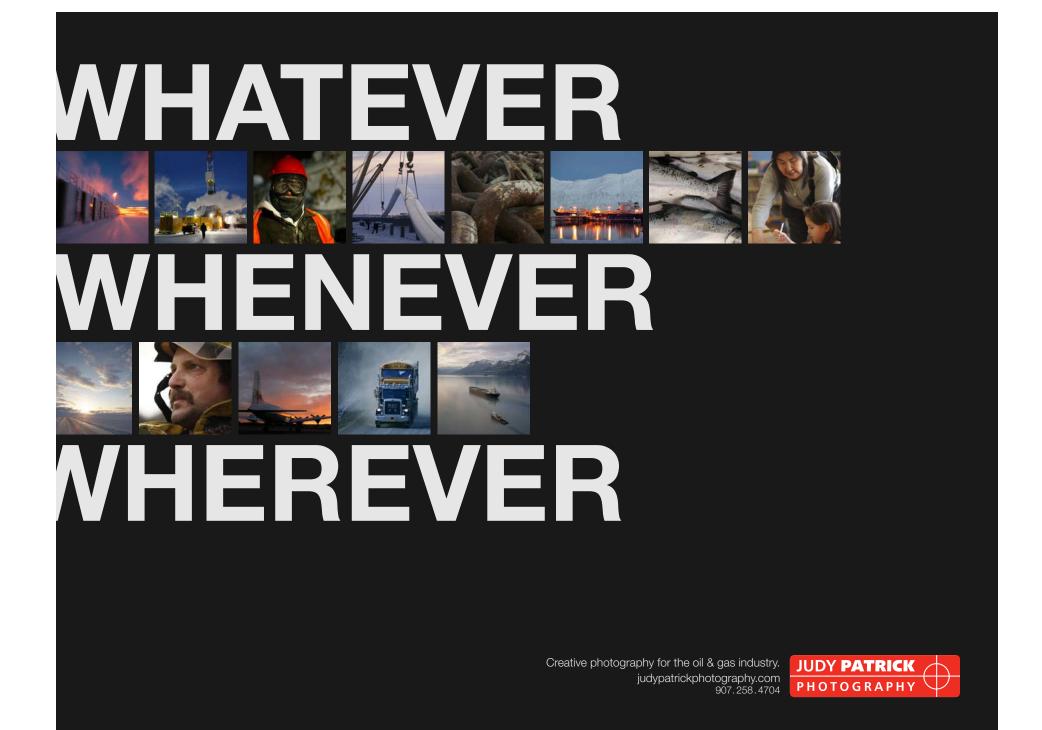
Frozens for the Willow Project in the National Petroleum Reserve in Alaska by the end of the year, in time for the winter construction season.

In their letter, the Alaska congressional delegation noted that the project has been developed under the strictest environmental standards in the world and is strongly supported by Alaska Native leaders, labor leaders, the state of Alaska, legislators from both parties, and President Joe Biden

"The expeditious approval of this crucial project would greatly benefit Alaska, our nation, and the world, while demonstrating the Administration's commitment to addressing inflation, high energy costs, the need for greater energy security, and environmental justice initiatives," the delegation wrote. "After years of study and review, both the Administration and Alaskans can feel confident that the Project will abide by the strictest environmental considerations in the world, while being constructed and operated by a company with an impressive record of safe and responsible development on the North Slope.

"We believe the final SEIS should identify the preferred alternative; appropriately weight the purpose of energy production in the NPR-A; and recognize the public interest in supporting energy security and responsible resource development. The permitting process must be completed by the end of 2022 at very latest so the project's proponent can make a final investment decision and hire Alaskans in time for the winter construction season. That decision will not be possible, and none of those jobs will be created, in the absence of a clean and timely Record of Decision (ROD)." ●

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CARBON PLAN

has been calling hydrogen opportunities with the Alaska Senate Resources Committee in April. He said many of the same reasons that allowed creation of the modern LNG industry in Alaska more than 50 years ago would allow creation of the clean hydrogen industry in Alaska,

•Ability to store and sequester carbon at the project site at tidewater.

•Natural gas with low greenhouse gas from conventional gas supply.

•A short distance from Cook Inlet to expanding clean hydrogen markets in Asia.

•An existing ammonia plant which would be positioned to be the first mover in the market.

Richards said carbon dioxide, CO2, is released from natural gas when gas is burned. Natural gas is somewhat difficult to store and transport, whereas hydrogen, while it releases no CO2 when burned is very difficult to store and transport, he said.

Converting hydrogen into ammonia makes storage and transportation easier and ammonia could then be exported to Asia to meet future energy needs there.

Natural gas can be converted first into hydrogen and then into ammonia, Richards said, by adding nitrogen in a process used by the existing Nutrien ammonia plant at Nikiski.

He told the committee the ammonia plant at Nikiski is in a position to be restarted and could meet an immediate need in Asia, with the ammonia a carrier of hydrogen atoms. Asia is looking to spike coal generation with ammonia to reduce the amount of carbon coming out of stacks when it is burned.

Richards said a study done of Cook Inlet some 10 years ago found 50 gigatons of CO2 sequestration is available.

He told the committee that while hydrogen is not part of AGDC's current plan, the corporation is working with partners on external funding for hydrogen opportunities in Alaska.

CO2 capture

Overheads prepared for AGDC's September board meeting include information on CO2 capture and sequestration, including that the Inflation Reduction Act increased the credit for CO2 capture and sequestration to \$85 per ton. The gas treatment plant on the North Slope, part of AGDC's project to move natural gas to Cook Inlet and liquefy it for shipment abroad, is planned to capture nearly 7 million tons per year. That would generate a credit of nearly \$600 million per year with the credit limited to 75 million tons or 12 years, and totaling more than \$6 billion. The GTP is being promoted as the Arctic carbon capture plant, "the largest carbon capture plant in the world."

Blue ammonia

If the CO2 produced in the conversion of natural gas into hydrogen and ammonia is captured and sequestered, the resulting "blue ammonia" is a clean fuel, AGDC said.

While both hydrogen and ammonia are clean fuels that do not emit CO2 when burned, converting hydrogen into ammonia makes storage and transportation easier.

The overheads say AGDC signed a memorandum of understanding with a consortium of Japanese and American companies, and an amendment adding additional parties to the MOU is in process.

The next steps, the board was told, will be CO2 sequestration data exchange and a consortium proposal for funding in the second quarter of 2023.

—KRISTEN NELSON

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Oil Patch Bits

Coffman Anchorage engineer earns professional license Coffman Engineers Inc. said Sept. 26 that it is pleased to announce Spencer Osgood's achievement on earning his Alaska

Professional Engineering license in civil engineering. Osgood graduated from Colorado State University in Fort Collins with a Bachelor of Science in civil engineering. He joined Coffman in 2016 as an intern supporting the corrosion control engineering department performing cathodic protection surveys. After graduating, he transitioned to a full-time position in the civil engineering

department. Osgood's experience includes commercial, industrial and military projects throughout Alaska and the Pacific Islands. He has knowledge in hydrological engineering including water, stormwater and

wastewater utility systems, as well as site design, project coordination and design, permitting, trenchless utility design and fuel storage containment systems. He is also certified as a NACE cathodic protection technician and continues to support corrosion control projects. Osgood credits his growth as an engineer on the mentorship he received from col-

leagues and the experience he gained on a wide scope of projects — from oil and gas industry projects to replacing sanitary systems with air vacuum systems in the Pacific Islands region. He has also learned from his clients. He leverages the good relationships he's built with them to understand their needs and challenges to find practical applications for each project. "We congratulate Spencer on obtaining his PE and look forward to a very bright future," said Coffman principal civil engineer, Mike Frison, PE.



SPENCER OSGOOD

ASTAC Annual Meeting's Return to In-Person

ASTAC said Sept. 29 that this fall has proven to be the rainiest on record for the state and normally that would keep people from getting out, but during the week of September 12th ASTAC's team and board held the 2022 annual meetings on the North Slope and had a great turnout. Quorum was met for every community, through online voting, mail-in ballots and in-person meeting attendance, exceeding membership participation of years past. Point Hope, Point Lay and Atqasuk incumbents John Long Jr., Sophie Tracey and Della Segevan were re-elected to new three-year terms on the board of directors. ASTAC's team and board would like to thank the membership for their participation in this year's voting process. In addition to the three board seats all districts voted and successfully passed two bylaw amendments. The cooperative was grateful to hold its meetings in-person for the first time in a couple years. The management team was able to share information about recent retired capital credits, executive reports and project updates throughout the week. Members had positive feedback at each meeting which greatly contributes to the direction of the co-op. ASTAC CEO and General Manager Jens Laipenieks said, "It is great to have returned to in person meetings. The turnout and balloting participation continue to increase year-over-year and it's great to have such an active membership. Thank you to our district communities and facility hosts for a wonderful meeting week. We look forward to seeing everyone for Swoosh." For more information about ASTAC visit www.astac.net.

Editor's note: Some of these news items will appear in the next Arctic Oil & Gas Directory, a full color magazine that serves as a marketing tool for Petroleum News' contracted advertisers. The next edition will be released in December.

Companies involved in Alaska's oil and gas industry

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CHARGING STATIONS

Designated corridors

The federal funding has to be used for EV high speed charging stations infrastructure on federally designated alternative fuel corridors, presumably to encourage the use of EVs for long distance travel. Phase 1 of the Alaska plan, expected to be completed by 2024, will focus on the installation of charging stations every 50 miles along the Glenn and Parks highways between Anchorage and Fairbanks. Subsequent work will involve deploying charging stations on the state's other highways, including along the Alaska Marine Highway system and for rural hub communi-

ties, AEA says.

Charging stations must have a minimum power rating of 150 kW, have at least four charging ports and be located within one mile of the relevant highway.

There are a number of options for using the federal funds in support of charging station deployment. Options include the construction of EV charging station infrastructure; charging station operation and maintenance; and community and stakeholder engagement.

Existing program

The federal funding will augment an existing program that AEA has underway to help fund the installation of high-speed EV charging stations on the highway system between Homer in the southern Kenai

Peninsula and Fairbanks, and on the highway corridor connecting Glennallen, Tok and Delta Junction. Funding for this program comes from Alaska's portion of a settlement with Volkswagen over the company's fraudulent manipulation of emissions testing on its diesel vehicles a few years ago, and from the Department of Energy's State Energy Program. The charging stations currently being implemented under this program do not meet the requirements under the new federal funding, in terms of the power ratings of the charging stations and the number of charging posts at a station.

—ALAN BAILEY

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continued from page 1

PROPANE SALES

said that based on its updated analysis of the impact of propane sales, "waste will not occur."

The company cited changes at the field over the past 10 years and said the current proposed sales volume is some 200 bpd. The Prudhoe owners "are continuing to work with interested wholesale buyers to potentially sell volumes of propane up to the facility maximum capacity limits," Hilcorp said, citing current facility limits of 600 bpd of propane, with the potential to increase to 1,000 bpd or more "with facility modifications."

2022 update

In a Sept. 28 decision, amending other order 75, the commission said: "Since the proposed small sales would not cause waste Hilcorp and the other PBU WIOs can continue to explore the possibility of commercial propane sales from the PBU."

There is a need, the commission said, noting that more propane is consumed in Alaska than is available from instate sources requiring propane to be imported from Canada and the Lower 48.

And there have been changes at Prudhoe, the commission said, with continuing field development since 2012 and the cessation in 2021 of natural gas liquid sales from Prudhoe to the Kuparuk River unit.

In 2012, the central gas facility handled 170 million cubic feet per day of propane, while Hilcorp now reports an average of 190 million cubic feet per day.

The commission said the CGF is operated to produce as much NGL as possible by operating as close as reasonable to the minus 50 degrees F limit of processing equipment. In 2012 the annual average processing temperature was minus 35 degrees F with a peak of minus 42 degrees, while currently the average is minus 38 F with a peak of minus 44 F.

Recovery issues

In its 2012 order, the commission found that "selling propane would reduce the amount of MI available for EOR purposes and thus would reduce ultimate recovery."

Currently, the commission said, while Hilcorp believes sales of propane will reduce miscible injectant available for enhanced oil recovery, reducing crude oil recovery, the company "now believes that depending on the timing and size of propane sales, ultimate hydrocarbon recovery, which would include propane sales, would actually increase."

The commission said in its conclusions that due to the aging of Prudhoe, miscible injectant "is less effective at enhancing oil recovery than it was when Other Order 75 was issued and will continue to become even less effective as time goes by."

Because the current proposal is for a smaller volume of propane — 200 to 1,000 bpd versus 2,500 bpd in the 2012 proposal — sales would have less impact on ultimate oil recovery than the proposal upon which the 2012 order was based.

"Selling small volumes of propane from PBU, up to the 1,000 bbls per day maximum potential capacity of the existing propane plant, will not harm, and would likely increase, ultimate recovery from the field," the commission said. ●

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OIL PRICES

2 million bpd was being considered.

ANS jumped \$2.53 on the day to close at \$91.78, WTI leapt \$2.89 to close at \$86.52 and Brent leapt \$2.94 to close at \$91.80.

Those gains built on sharp increases the previous day sparked by a risk-on atmosphere that lifted financial markets following an intervention the week before from the Bank of England to calm the UK bond market.

ANS popped \$2.35 Oct. 3 to close at \$89.26, as WTI skyrocketed \$4.14 to close at \$83.63 and Brent rose 90 cents to close at \$88.86.

U.S. equities surged Oct. 3 and Oct. 4 to deliver a rare two-day return of over 5%. The surge may reflect an inflection point in markets which have collapsed since highs set in late 2021, carrying commodity prices — including oil — lower on recession fears.

The two-day spike was the largest since the 2020 recovery from the COVID crash.

Every time such a rise has occurred since 2006, it has followed a policymaker intervention to quell significant risk to, or destabilization of, the global financial system, according to Bryan Rich, founder of the Billionaire's Portfolio.

"Major turning points in markets have often been the result of some form of intervention — i.e., policy action or adjustment," Rich said in Pro Perspectives Oct. 5.

"Based on this history, it's fair to say that we are at a significant moment, seeing significant vulnerabilities in the financial system (driven by rising rates), and we've seen a significant response (by the Bank of England)," he said.

"The financial story is controlled by the Fed—they're reducing liquidity, but the fundamental story is driven by OPEC—they're potentially taking oil supply out of the market," Currie said. "It's OPEC versus the Fed."

While investment risk-on sentiment has supported oil prices, drawdowns in U.S. inventories for the week ending Sept. 30 evidence resilient demand.

U.S. commercial crude oil inventories — excluding the Strategic Petroleum Reserve — dropped 1.4 million barrels from the week prior to 429.2 million barrels — 3% below the five-year average for the time of year, the Energy Information Administration said in an Oct. 5 report.

Total motor gasoline inventories fell 4.7 million barrels for the period to 9% below the five-year average for the time of year, the EIA said, adding that both finished gasoline and blending components inventories decreased. Distillate fuel inventories dropped 3.4 million barrels to 21% below the five-year average for the time of year.

The market absorbed an additional 6.2 million barrels of crude from the SPR during the week, taking the nation's emergency supply to 416.4 million barrels on Sept. 30, according to EIA data. The SPR held 617.8 million barrels on Oct. 1, 2021.

Oil prices slipped on the last two days of September. ANS dropped \$2.12 Sept. 30 to close at \$86.91, while

ANS dropped \$2.12 Sept. 30 to close at \$86.91, while WTI dropped \$1.74 to close at \$79.49 and Brent trimmed 53 cents to close at \$87.96.

ANS closed 53 cents lower Sept. 29 at \$87.96, WTI was down 92 cents to close at \$81.23 and Brent fell 83 cents to close at \$88.49.

From Wednesday to Wednesday, ANS rose \$4.44 from its Sept. 28 close of \$89.44 to finish at \$93.88 Oct. 5.

OPEC versus the Fed

OPEC is incentivized to reduce output because it is the only oil producer in the world with spare capacity, according to Jeff Currie, global head of commodities research at Goldman Sachs.

"I like to argue that the old oil order is back," he said in an Oct. 3 CNBC interview.

"OPEC is probably more powerful than it's ever been in its 60-year history since its inception," he said, adding that one of the key reasons is the fact that there has been a dearth of investment in alternate energy sources, so OPEC is really the only game in town.

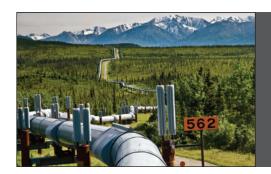
The reason OPEC would want to squeeze output in the context of extremely low inventories and a record tight market is that the prices are down more than 40% because investors are fleeing the market, he said.

"One way to attract capital back into the sector is kick up the backwardation ... is to roll yield on the front of that curve," Currie said. "Right now, you have cash paying 5% 12-month LIBOR and the question is what can they get oil to pay on that roll yield and if they risk-adjust it and get it high enough you're going to attract capital back."

The financial story and the fundamental story for oil can be thought of as two different stories, Currie said.

"The financial story is controlled by the Fed — they're reducing liquidity, but the fundamental story is driven by OPEC — they're potentially taking oil supply out of the market," he said. "It's OPEC versus the Fed." ●

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BLUECREST DRILLING

on exploration but then could not collect from the State. ... Some sold tax credits at a drastically reduced price to other companies to get funds to stay afloat."

Worse, he said, "the State also cancelled the tax credit program we were counting on from the start."

But, Martineck told PN, agencies such as the Alaska Oil and Gas Conservation Commission have been good to work

The company has to get 24 well permits to drill a trident fishbone — one main wellbore from the surface that will then split into three subsurface "fishbones" with eight wells

"AOGCC has been really responsive and good to work with. They're keen on new technology," he said.

The Hansen field in the Cosmopolitan unit is three miles offshore the southern Kenai Peninsula and five miles north of Anchor Point.

Accessed from an onshore pad using directional drilling, the accumulation's production is "primarily oil but there is an associated gas component to it," Martineck told PN.

BlueCrest sells its gas to local utilities for use in the local market.

Largest CI structure

Southcentral Alaska utilities are going to start seeing gas shortages in the next few years, he said.

"BlueCrest has the largest known underdeveloped structure in the inlet. ... We have a large Tyonek gas reservoir that is untapped. We need to start working on it now to have gas in two or three years," Martineck told PN, adding that development would involve putting in a new platform and pipeline.

He said BlueCrest will continue to evaluate and advance their offshore Tyonek Gas Development, but they can't make it a reality without a major infusion of funds.

BlueCrest also plans to continue to develop the Starichkof/Hemlock oil reservoirs based on new information gained from each new well, beginning with the H10 Trident Fishbone.

During the eighth POD BlueCrest planned to maintain production, conduct hot oil treatments to maintain rates, and continue planning for potential gas development. These operations were completed, Martineck told the division.

Additionally, BlueCrest upgraded and overhauled several major pieces of processing equipment in the onshore Hansen Production Facility.

"In 2022, we overhauled our two High Pressure gas compressors. These compressors are the lifeline of the facil-

They're not only used for compressing natural gas for sale but are also used to gas lift all BlueCrest's wells and provide fuel for all its plant operations.

Another large undertaking in 2022 was making "some important upgrades to our Mechanical Refrigeration Unit. This unit is used to remove unwanted liquids and impurities in our natural gas to bring the natural gas to pipeline sales specification," Martineck said.

"BlueCrest also performed Hot Oil Treatments on our wells every 3 to 4 weeks. This helped with maintaining production levels in the facility."

Martineck said BlueCrest will continue to make adjustments to its wells to maximize production levels and to extend their lives. •

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GWEN HOLDMANN

FRANK RICHARDS

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INSIDER

Anchorage-based Finnex had been formed on June 23, 2020. According to an Alaska Division of Corporations filing, at the time Thyssen Petroleum Alaska LLC held 85% of Finnex and Galactico LLC the remaining 15%. An affiliate of Thyssen was part of a joint venture put together by the original operator of the SMU,

small independent Brooks Range Petroleum Corp.

Mustang was the first oil field on Alaska's North Slope to have been taken from discovery to production by Brooks Range Petroleum Corp., or BRPC.

BRPC drilled the Mustang discovery well, North Tarn 1A, in January 2012. The field is thought to hold 21.2 million barrels of proven oil in place.



ALAN WEITZNER

Mustang began producing oil in early November 2019, per the Alaska Oil and Gas Conservation Commission. The field produced 10,999 barrels of oil that month, averaging 478 barrels a day for the 23 days it was in production.

Due to BRPC's financial difficulties the field has been offline ever since. Those financial difficulties were primarily with lender AIDEA's foreclosure and the previous gubernatorial administration's refusal to pay millions in approved oil and gas tax credits designed to offset exploration expenses.

But Finnex obviously has not lost interest.

A Sept. 30 document posted Oct. 4 on Alaska's Division of Oil and Gas website contained the 10th plan of development for the 8,960-acre SMU. It was submitted by MHLLC on behalf of owners MHLLC, Nabors Drilling Technologies USA Inc. and AVCG LLC.

The Sept. 30 filing said that during the ninth plan of development MHLLC "was actively engaged with interested parties concerning the competitive sale process for the unit and related infrastructure."

Those efforts led to an announcement at the August 2022 AIDEA Board meeting by AIDEA Executive Director Alan Weitzner, who said MHLLC had executed a non-binding term sheet with Finnex to develop and manage the Mustang project.

In the 10th plan of development, or POD, covering calendar year 2023, MHLLC and Finnex "will work expeditiously and prudently to agree upon and execute definitive documents related to the development and management" of the Mustang project and the SMU.

Long-range proposed development activities for the unit, MHLLC said, "pursuant to the expected transaction with Finnex," is for MHLLC's "operator successor" to provide to the division an amendment to the 10th POD. MHLLC expects that the amendment will include, but not be limited to, "plans for delineation of the underlying oil or gas reservoir(s), a detailed technical presentation supporting the activities and expected timeline to bring the reservoir(s) into production, and to maintain and enhance production once established."

Obviously the deal with Finnex is expected to include an acquisition since the 10th POD also says, "MHLLC will also require its successor to apply to the Division for transfer of the MHLLC working interests in the SMU," as well as provide notification regarding change of operatorship and assume any active, or have filed for all, required permits and establish any and all bonding requirements other than those that have previously been established by MHLLC.

—KAY CASHMAN

Dunleavy establishes Office of Energy Innovation

ALASKA GOV. MIKE DUNLEAVY recently signed Administrative Order No. 340 creating the Office of Energy Innovation to address the evolving energy needs of

The A.O. was issued amid recent destabilizing global events that "have illustrated the importance of energy independence and with recognition of the positive economic impacts that come from domestic energy production," a Sept. 30 press release from the governor's office said.

The office was formed "with the purpose of developing policies that enable Alaska to capitalize on its vast energy potential to lower cost of energy and enhance the stability of energy delivered to Alaskans; to collaborate with public and private institutions to develop pragmatic, market-driven solutions; to assist all communities in accessing innovative technology and necessary funding to secure low cost reliable energy; and support efforts that enhance Alaska's role in a national clean energy future through the development of a strong and responsible critical minerals mining program and the investment in emerging energy technologies," the governor's office said in its press

"Alaska is an energy giant in all its forms. We'll continue to be an oil and gas giant, but we are all in for every form of energy - wind, solar, hydro, tidal, geothermal, micronuclear, and hydrogen. The Office of Energy Innovation will coordinate this pursuit of sustainable, dependable, and affordable energy," Dunleavy said.

"From AEA's electric vehicle charging station plan to the U.S. Air

Force ... releasing a RFP for the Eielson Air Force Base micro-reactor pilot program, Alaska has seen a number of exciting developments recently. This is an exciting time for energy and the Office of Energy Innovation will make sure we don't miss a single opportunity to support Alaska's energy independence," Dunleavy said.

He announced the Office of Energy Innovation at Alaska Energy Authority, or AEA, in Anchorage, alongside DNR Acting Commissioner Akis Gialopsos, AEA Executive Director Curtis Thayer, John Burns, president and CEO of Golden Valley Electric Association, Tony Izzo, chief executive officer of Matanuska Electric Association, Gwen Holdmann, associate vice chancellor of University of Alaska, and Frank Richards, president of Alaska Gasline Development Corp.

"Alaskans need energy supplies that are stable and secure," said Gialopsos. "A coordinated effort under Governor Dunleavy's Office is a tremendous step forward that focuses agencies' efforts on Alaska becoming a leader in both carbon capture, utilization, and storage, or CCUS, and building the critical minerals of this state and nation."

"As the State's energy office, we are committed to ensuring that all Alaskans have access to safe, reliable, affordable energy," said Thayer. "This Administrative Order builds on and reaffirms the work that the State with our partners here today, and will

to produce clean and affordable hydrogen in the form of ammonia to meet the growing demand from Alaskans and world markets. The Alaska LNG project can deliver North Slope natural gas to re-start existing and jump start future ammonia production in Nikiski," said Richards, noting the new Office of Energy Innovation will "foster vital collaboration between numerous Alaska stakeholders to craft a versatile and innovative energy future for Alaska and the nations around the world who look to us for energy

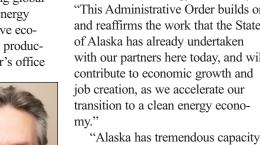
"Safe, reliable, affordable and sustainable energy is critical to Alaska's economic and social viabili-

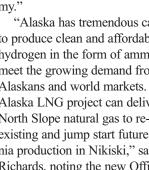
ty," said Burns. "The Office of Energy Innovation will ensure focused coordination and collaboration amongst all stakeholders to leverage and maximize Alaska's abundant natural resources and state and federal funding opportunities to positively transform Alaska's energy future."

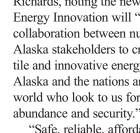
"We stand at the crossroads of a pivotal moment for the future of energy in the State," said Izzo. "MEA is united with the other interconnected Railbelt utilities in our commitment to work with the Governor, legislature and other stakeholders to be a catalyst for a secure, clean and diverse energy mix that can drive economic growth and a vibrant Alaska."

"Microreactors and modular nuclear reactors are fast approaching market readiness, and with the planned project at Eielson AFB in 2027 Alaska is poised to be an early adopter of this emerging technology," said Holdmann.

The A.O. takes effect immediately and will utilize existing personnel and resources within the Office of the Governor.



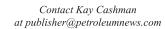




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