



## Fiord West well hits 12,000 bpd; Exit from ANWR 1002 Area political

CONOCOPHILLIPS ALASKA Inc.'s Fiord West Kuparuk well CD2-310 has been "flowing steady" at 11,500 barrels of oil per day, CPAI's media director told Petroleum News June 1.

"The well choke is now fully open. A high rate was reached on May 25 of 12 MBOPD," Rebecca Boys said in an email.

On May 18, CPAI achieved first oil at the North Slope Fiord West Kuparuk satellite, which is in the Alpine field of the Colville River unit. The well, CD2-310, was a record-setting horizontal well drilled into the Kuparuk by Doyon Rig 26, an extended reach drilling rig nicknamed the "Beast"

see INSIDER page 7



## AltaGas sells Enstar to another Canadian utility, TriSummit

AltaGas Ltd. has sold its Alaska utilities to TriSummit Utilities Inc., the companies said May 26. The Alaska assets include 100% interest in Enstar Natural Gas and the Alaska Pipeline Co. and its 65% indirect interest in Cook Inlet Natural Gas Storage Alaska. AltaGas said Enstar and CINGSA "will continue to operate as standalone utilities and remain headquartered in Alaska" with Enstar employees becoming TriSummit employees on closing of the sale.

Enstar has some 150,000 customers.

TriSummit said the purchase is the company's first move into

see ENSTAR SALE page 10



JARED GREEN

## Prudhoe owners looking to sell propane, cite changes since 2012

In 2012, in response to a 2011 request to consider whether there was waste at Prudhoe Bay because propane was not being produced for sale, the Alaska Oil and Gas Conservation Commission held a hearing. In the order it issued in August 2012, Other Order No. 075, AOGCC concluded that propane was not being wasted. It said the sale of a barrel of oil equivalent of propane would result in a net loss of 0.93 BOE of oil and recaptured miscible injectant. It found "clear and substantial benefits

see PROPANE SALES page 10



HAROLD HEINZE

## AIDEA applies for Corps permit to build West Susitna Access Road

The Alaska Industrial Development and Export Authority has applied to the U.S. Army Corps of Engineers for a 404 permit for the construction of a proposed West Susitna Access Road.

The proposed 100-mile road would follow a route northwest from Big Lake along the east side of Mount Susitna to a termination point not far south of Rainy Pass in the Alaska Range.

The road would provide access to natural resources on the west side of the Susitna Valley.

A 404 permit is needed for the discharge of dredged or fill materials into waters of the United States during a construction project.

see SUSITNA ACCESS page 10

### EXPLORATION & PRODUCTION

# Tidal power leads

Hilcorp Alaska's Luke Saugier advocates for multiple sources of energy

By KAY CASHMAN  
Petroleum News

In the last two months Hilcorp representatives have made three significant and related pronouncements to Alaskans, the most recent from Luke Saugier, Hilcorp's top executive in Alaska, in his comments at the Governor's Alaska Sustainability Conference in Anchorage on May 25.

The three related declarations were as follows:

- In an April 12 stakeholders' meeting with Railbelt utilities Hilcorp's rep warned that while Hilcorp had sufficient natural gas for their existing fuels contracts, they did not have firm natural gas



LUKE SAUGIER

supplies available beyond that. Additionally, any future contracts would be dependent on current drilling programs to secure additional reserves. The first contract (Homer Electric Association) would terminate at the end of first quarter 2024, while others were in place until as late as 2033. Since natural gas is the only fuel used by Southcentral Alaska utilities and Hilcorp-operated Cook Inlet basin fields supply approximately 90% of that gas, the message was clear: the utilities had to begin searching for other sources of natural gas and/or other sources of energy.

- The second public pronouncement came on

see HILCORP UPDATES page 11

### UTILITIES

# A transmission upgrade

AEA, Railbelt utilities to modernize, boost capacity of Kenai Peninsula system

By ALAN BAILEY  
for Petroleum News

The Alaska Energy Authority and the Railbelt electric utilities plan major upgrades to the electricity transmission system on the Kenai Peninsula at a cost in excess of \$200 million, AEA announced on May 25.

The upgrades will modernize the system, reducing line losses and increasing the capacity of the system to carry power.

A primary purpose is to improve the delivery of power from the Bradley Lake Hydroelectric Project in the southern Kenai Peninsula — Bradley Lake produces the cheapest available power on the intercon-

The planned work also involves a study into the possibility of constructing a second transmission path for shipping electricity between the Kenai Peninsula and Southcentral Alaska.

nected Railbelt electrical system that extends from the southern Kenai Peninsula, north to Fairbanks in the Interior.

The planned projects include upgrades to the transmission lines between Bradley and Soldotna, Soldotna and Sterling, and Sterling and Quartz Creek.

see KENAI UPGRADES page 9

### FINANCE & ECONOMY

# OPEC minus Russia?

Members mull dropping Russia from OPEC+, Permian output to surpass Iraq

By STEVE SUTHERLIN  
Petroleum News

Alaska North Slope and Brent crudes closed above \$120 per barrel to end the Month of May as the European Union reached agreement May 30 on a plan to phase out purchases of most Russian oil by the end of the year.

Some members of the Organization of the Oil Exporting Countries are considering suspending Russia's participation in the OPEC+ oil-production deal as Western sanctions and an EU boycott threaten Moscow's ability to pump more, the Wall Street Journal reported May 31, citing unnamed OPEC delegates.

Excluding Russia from the oil production

increase quotas reportedly would allow other producers such as Saudi Arabia and the United Arab Emirates to boost their output to compensate.

Brent leapt \$3.41 May 31 to close at \$122.84, while ANS fell 11 cents to \$120.62, and West Texas Intermediate fell 40 cents to close at \$114.67.

Brent plummeted \$6.55 to close at \$116.29 June 1 as the Financial Times reported that Saudi Arabia stands ready to pump more oil if Russian output sinks under the EU ban. ANS fell \$1.19 on the day to close at \$119.43, while WTI gained 59 cents to close at \$115.26.

Citing sources, the Financial Times reported Saudi Arabia concedes the risk of a supply shortage

see OIL PRICES page 12

UTILITIES

# Electric utility sustainability must balance

Reliability and affordability also in mix; the challenge is there is hardly any technology that's 24-7, carbon-free and affordable

By ALLEN BAKER  
For Petroleum News

Electric utilities are making progress on reducing greenhouse gas emissions, but progress on renewables needs to be balanced against other needs for their customers, Heather Grahame told the Governor's Alaska Sustainability Energy Conference in Anchorage on May 25.

"There are three primary issues that define and guide how we invest in generation: The first factor is reliability. The second factor is affordability. And the third factor is sustainability," said Grahame of NorthWestern Energy, which supplies power to about 750,000 customers in Montana, Nebraska and South Dakota.

The challenge for utilities in moving toward a carbon-free future, she told the conference, is that currently "there is hardly any technology that is 24-7, and carbon-free, and affordable."

A utility simply has to provide its product all of the time. It's crucial to modern life and health.

"The core obligation of any utility is to provide energy to our customers 24-7. Energy is the foundation of everything. Without energy we don't have light. Without

energy we don't have heat. We don't have cooling. We don't have computers that work. We don't have ventilators in hospitals. And so it is our core obligation to make sure that when people turn on the lights, they have the energy that they need," she said.

### Responsibility to customers

Power companies need to be careful about costs. A public utility serves everyone, so it has a responsibility not to raise prices so high that consumers can't afford the power they need.

"Montana is a poor state. Twenty-five percent of our customers are eligible for low-income energy assistance and probably half of those live below the poverty line. Our rates in Montana's are below the national average – the average electric bill in the Lower 48 is \$108 a month. Ours is \$92," said Grahame. That still can be a big slice of the monthly expense for a rural household.

Providing power, especially in such a vast geographical area, means dealing with the peaks and valleys of



HEATHER GRAHAME

*The challenge for utilities in moving toward a carbon-free future, she told the conference, is that currently "there is hardly any technology that is 24-7, and carbon-free, and affordable."*

demand. Most people turning on a dishwasher aren't really aware of that, and it's arguably the biggest challenge for those companies.

### Expensive purchased power

Buying outside power during peak demand periods can be very expensive, she related.

"At NorthWestern, we have plenty of energy on an average day to provide energy to our customers," she told the conference. "But during times of sustained cold or sustained heat, we don't have the generation ourselves. We are reliant on the market (other companies) for 40 to 50 percent of our energy.

"If the energy were there at a reasonable price, that

see ENERGY CONFERENCE page 6

## contents

Petroleum News

Alaska's source for oil and gas news

### ON THE COVER

#### Tidal power leads

Hilcorp Alaska's Saugier advocates for multiple sources of energy

#### A transmission upgrade

AEA, Railbelt utilities to modernize Kenai Peninsula system

#### OPEC minus Russia?

Members mull dropping Russia from OPEC+

#### Oil Patch Insider: Fiord West well hits 12,000 bpd; Exit from ANWR 1002 Area political

#### AltaGas sells Enstar to another Canadian utility, TriSummit

#### Prudhoe owners looking to sell propane, cite changes since 2012

#### AIDEA applies for Corps permit to build West Susitna Access Road

### EXPLORATION & PRODUCTION

4 North Slope April production up marginally

SIDEBAR, PAGE 4: Cook Inlet natural gas holds steady

6 Hilcorp installs Cannery Loop compressor

6 US drilling rig count drops by 1 to 727

### UTILITIES

2 Electric utility sustainability must balance

Reliability and affordability also in mix; the challenge is there is hardly any technology that's 24-7, carbon-free and affordable

### What's the big attraction?



- A. an industry institution
- B. quality, accurate reporting
- C. attractive, readable design

To advertise in Petroleum News, call Susan at 907-250-9769. To subscribe, call Renee at 281-978-2771

**"I'M NOT A DEMOCRAT OR A REPUBLICAN, I'M AN ALASKAN."**

**INDEPENDENT ALASKAN**

**AL GROSS**  
FOR CONGRESS

*Vote by Mail for*

**Gross, Al – Nonpartisan**

**BALLOTS DUE JUNE 11!**

DRALGROSSAK.COM | DRALGROSSAK | DRALGROSS

PAID FOR BY AL GROSS FOR CONGRESS

And I'll take the best ideas from both parties to deliver for our state.  
DR. AL GROSS

# Alaska-Mackenzie Rig Report

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

## Alaska Rig Status

### North Slope - Onshore

<b>All American Oilfield LLC</b> IDECO H-37	AAO 111	Deadhorse, Stacked in Cruz Yard	Available
<b>Doyon Drilling</b>			
Dreco 1250 UE	14 (SCR/TD)	Milne Point, MPU M-27 Mobilization	Hilcorp Alaska LLC
Dreco 1000 UE	16 (SCR/TD)	Standby	
Dreco D2000 Uebd	19 (SCR/TD)	Kuparuk, Start Up	ConocoPhillips
AC Mobile	25	Alpine, MT7-02	ConocoPhillips
OIME 2000	141 (SCR/TD)	Standby	
	142 (SCR/TD)	Alpine, CD4-597 Maintenance	ConocoPhillips
TSM 700	Arctic Fox #1	Standby	
ERD	26	Alpine, CD2-361 Maintenance	ConocoPhillips
<b>Hilcorp Alaska LLC</b> Rotary Drilling	Innovation	Milne Point, S Pad	Hilcorp Alaska LLC
<b>Nabors Alaska Drilling</b>			
AC Coil Hybrid	CDR-2 (CTD)	Prudhoe Bay	Hilcorp Alaska LLC
AC Coil	CDR-3 (CTD)	Kuparuk	ConocoPhillips
Ideco 900	3 (SCR/TD)	Deadhorse, Stacked	Available
Dreco 1000 UE	7-ES (SCR-TD)	Kuparuk	ConocoPhillips
Mid-Continental U36A	3-S	Stacked	Available
Oilwell 700 E	4-ES (SCR)	Stacked	Available
Dreco 1000 UE	9-ES (SCR/TD)	Stacked	Available
Oilwell 2000 Hercules	14-E (SCR)	Deadhorse	Available
Oilwell 2000 Hercules	16-E (SCR/TD)	Stacked	Brooks Range Petroleum
Emsco Electro-hoist			
Oilwell 2000 Canrig 1050E	27-E (SCR-TD)	Stacked	Available
Oilwell 2000	33-E	Deadhorse	Available
Academy AC Electric CANRIG	99AC (AC-TD)	Stacked	Available
OIME 2000	245-E (SCR-ACTD)	12 Acre Pad, stacked	Available
Academy AC electric CANRIG	105AC (AC-TD)	Alkaid 2	Greatbear/Pantheon
Academy AC electric Heli-Rig	106AC (AC-TD)	Stacked	Available
<b>Nordic Calista Services</b>			
Superior 700 UE	1 (SCR/CTD)	Deadhorse	Available
Superior 700 UE	2 (SCR/CTD/TD)	Deadhorse	Available
Ideco 900	3 (SCR/TD)	Deadhorse	ASRC
Rig Master 1500AC	4 (AC/TD)	Oliktok Point	ENI
<b>Parker Drilling Arctic Operating LLC</b>			
NOV ADS-10SD	272	Deadhorse, Stacked	Available
NOV ADS-10SD	273	Deadhorse, Stacked	Available

### North Slope - Offshore

<b>Doyon Drilling</b>			
Sky top Brewster NE-12	15 (SCR/TD)	Spy Island SP40-E4	ENI
<b>Nabors Alaska Drilling</b>			
OIME 1000	19AC (AC-TD)	Oooguruk	ENI

### Cook Inlet Basin – Onshore

<b>BlueCrest Alaska Operating LLC</b> Land Rig	BlueCrest Rig #1	Stacked	BlueCrest Alaska Operating LLC
<b>Glacier Oil &amp; Gas</b>	Rig 37	West McArthur River Unit Workover	Glacier Oil & Gas
<b>Hilcorp Alaska LLC</b>			
TSM-850	147	Stacked	Hilcorp Alaska LLC
TSM-850	169	Seaview	Hilcorp Alaska LLC

### Cook Inlet Basin – Offshore

<b>Hilcorp Alaska LLC</b> National 110	C (TD)	Platform C, Stacked	Hilcorp Alaska LLC
	Rig 51	Steelhead Platform, Stacked	Hilcorp Alaska LLC
	Rig 56	Monopod A-13, stacked	Hilcorp Alaska LLC
<b>Nordic Calista Services</b> Land Rig	36 (TD)	Kenai, stacked	Available
<b>Spartan Drilling</b> Baker Marine ILC-Skidoff, jack-up		Spartan 151, Tyonek Platform	Hilcorp Alaska LLC
<b>Furie Operating Alaska</b> Randolf Yost jack-up		Nikiski, OSK dock	Available
<b>Glacier Oil &amp; Gas</b> National 1320	35	Osprey Platform, activated	Glacier Oil & Gas

## Mackenzie Rig Status

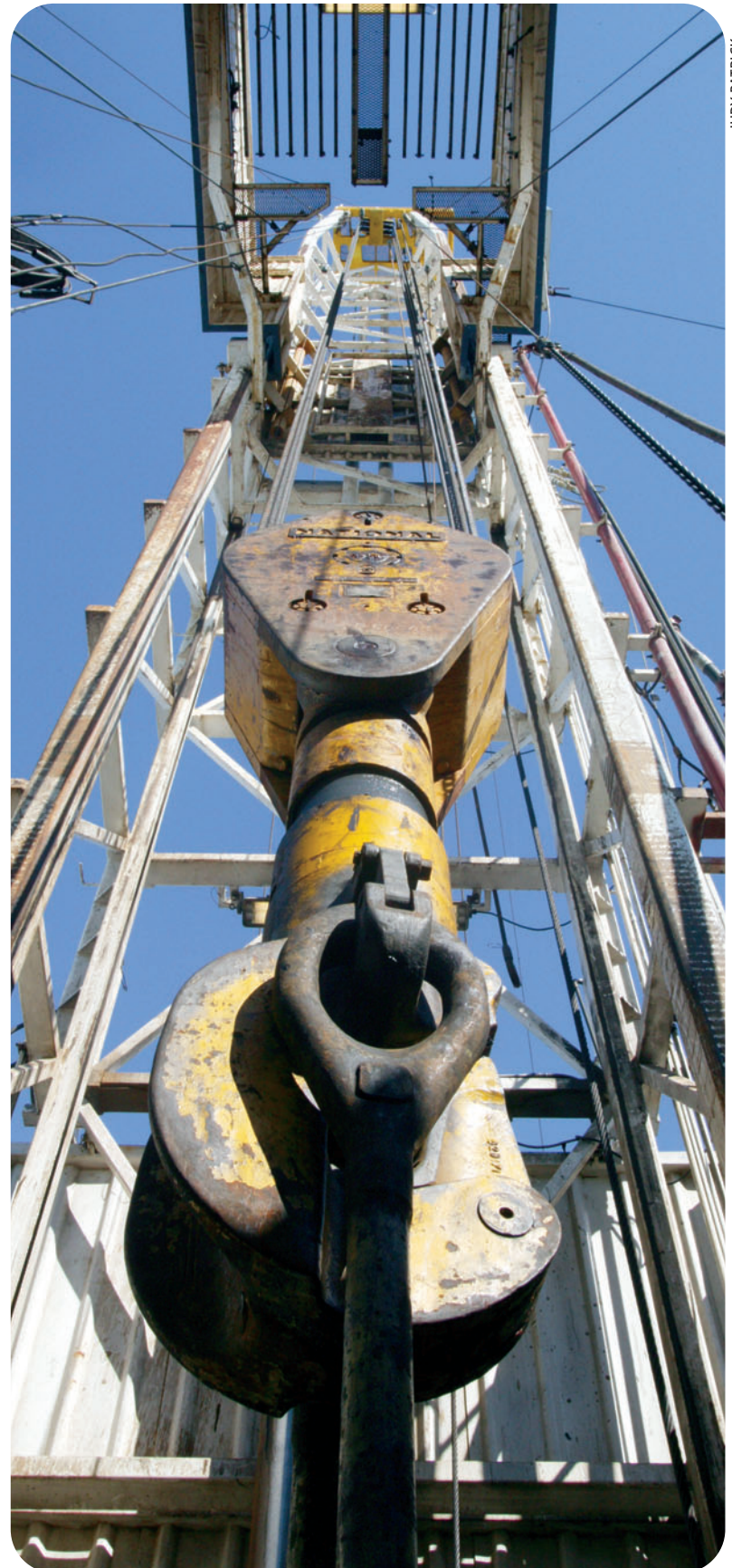
### Canadian Beaufort Sea

<b>SDC Drilling Inc.</b> SDC Mobile Offshore Drilling Unit Rig #2		Set down at Roland Bay	Available
--	--	------------------------	-----------

The Alaska-Mackenzie Rig Report as of June 1, 2022.  
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\*

	May 27	May 20	Year Ago
United States	727	728	457
Canada	103	88	62
Gulf of Mexico	15	17	14

### Highest/Lowest

US/Highest	4530	December 1981
US/Lowest	244	August 2020

\*Issued by Baker Hughes since 1944

The Alaska-Mackenzie Rig Report  
is sponsored by:



• EXPLORATION & PRODUCTION

# North Slope April production up marginally

ANS averaged 490,742 bpd; Greater Mooses Tooth up 17,480 bpd from March; Cook Inlet up 5.5%; gain led by Beaver Creek, up 70.7%

## Cook Inlet natural gas holds steady

Cook Inlet natural gas production averaged 205,786 thousand cubic feet per day in April, up just 236 mcf, 0.1%, from a March average of 205,550 mcf per day but down 6.9% from an April 2021 average of 220,959 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's largest gas fields — those producing 5% or more of the total — accounted for 83.2% of production in April.

Hilcorp's Niniichik field had the highest average production in April, 32,528 mcf per day, 15.8% of inlet production, down 1,529 mcf per day, 4.5%, from a March average of 34,057 mcf per day and up 13.5% from an April 2021 average of 28,658 mcf per day.

The Hilcorp-operated Beluga River field averaged 32,226 mcf per day in April, 15.7% of inlet production, up 1,196 mcf per day, 3.9%, from a March average of 31,030 mcf per day and up 53.6% from an April 2021 average of 20,980 mcf per day.

Hilcorp's North Cook Inlet averaged 28,360 mcf per day in April, 13.8% of inlet production, down 2,054 mcf per day, 6.8%, from a March average of 30,413 mcf per day and up 103.6% from an April 2021 average of 13,933 mcf per day.

Hilcorp's Kenai field averaged 25,887 mcf per day, 12.6% of inlet production,

see **INLET GAS** page 5

By **KRISTEN NELSON**

Petroleum News

Alaska North Slope production averaged 490,741 barrels per day in April, up marginally — 0.1%, 473 bpd — from a March average of 490,268 bpd, also up marginally, 0.04%, from an April 2021 average of 490,525 bpd.

The month-over-month increase came from crude, 88% of ANS production in April, which averaged 431,681 bpd, up 0.4%, 1,498 bpd, from a March average of 430,183, but down 1.3% from an April 2021 average of 437,136 bpd. Natural gas liquids, 12% of ANS production in April, averaged 59,061 bpd, down 1,025 bpd, 1.7%, from a March average of 60,086, although up 10.6% from an April 2021 average of 53,389 bpd.

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

## Greater Mooses Tooth

The largest month-over-month increase, a gain of 27.2%, 3,733 bpd, came from ConocoPhillips Alaska's Greater Mooses Tooth in the National Petroleum Reserve-Alaska, which averaged 17,480 bpd in April, up from a March average of 13,748 bpd and up 570.8% from an April 2021 average of 2,606 bpd.

The big difference at Greater Mooses Tooth is GMT2, the pad at the Rendezvous pool, where sustained production began Dec. 12. GMT2 averaged 16,367 bpd, 94% of GMT production, in April, compared to GMT1, the Lookout pool, which averaged 1,113 bpd, 6%.

## Other month-over-month increases

Eni's Nikaitchuq averaged 18,034 bpd in April, up 324 bpd, 1.8%, from a March average of 17,710 bpd and up 12.6% from an April 2021 average of 16,021 bpd.

The Hilcorp Alaska-operated Endicott field averaged 7,074 bpd in April, up 4.4%, 301 bpd, from a March average of 6,774 bpd and up 7.1% from an April 2021 average of 6,606 bpd. Crude accounted for 84.2% of Endicott production in April, 5,958 bpd, up 237 bpd, 4.2%, from a March average of 5,721 and up 2.3% from an April 2021 average of 5,826 bpd. Endicott NGLs averaged 1,116 bpd in April, 15.8% of the field's production, up 63 bpd, 6%, from a March average of 1,053 bpd and up 43% from an April 2021

*The big difference at Greater Mooses Tooth is GMT2, the pad at the Rendezvous pool, where sustained production began Dec. 12.*

average of 780 bpd.

ConocoPhillips' Colville River averaged 32,092 bpd in April, up 295 bpd, 0.9%, from a March average of 31,797 bpd and down 30.3% from an April 2021 average of 46,032 bpd. In addition to oil from the main Alpine pool, Colville production includes production from the Nanuq and Qannik oil pools.

Hilcorp Alaska-operated Point Thomson averaged 9,121 bpd in April, up 162 bpd, 1.8%, from a March average of 8,960 bpd and up 14.5% from an April 2021 average of 7,970 bpd.

## Month-over-month declines

The ConocoPhillips-operated Kuparuk River field averaged 82,090 bpd in April, down 2,328 bpd, 2.8%, from a March average of 84,418 bpd and down 10.5% from an April 2021 average of 91,690 bpd.

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

Hilcorp North Slope-operated Prudhoe Bay averaged 274,574 bpd in April, down 780 bpd, 0.3%, from a March average of 275,353 bpd but up 2.3% from an April 2021 average of 268,538 bpd. Prudhoe crude averaged 220,075 bpd in April, 80.2% of the field's production, up 251 bpd, 0.1%, from a March average of 219,824 bpd and up 0.2% from an April 2021 average of 219,683 bpd. Prudhoe NGLs, 19.9% of the field's April production, averaged 54,498 bpd, down 1,031 bpd, 1.9%, from a March average of 55,529 bpd but up 11.6% from an April 2021 average of 48,856 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.

Eni's Oooguruk averaged 5,000 bpd in April, down 498 bpd, 9.1%, from a March average of 5,498 bpd and down 17% from an April 2021 average of 6,026 bpd.

Hilcorp Alaska's Milne Point averaged 36,529 bpd in April, down 480 bpd, 1.3%,

see **ANS OUTPUT** page 5




Fairbanks  
**907-455-6777**


Anchorage  
**907-344-6777**

[www.abrinc.com](http://www.abrinc.com)

With over 45 years of **Alaska-based environmental consulting** experience, ABR provides exceptional scientific products to efficiently meet our clients' needs.



[www.PetroleumNews.com](http://www.PetroleumNews.com)

<b>Kay Cashman</b>	PUBLISHER & FOUNDER	ADDRESS P.O. Box 231647 Anchorage, AK 99523-1647
<b>Mary Mack</b>	CEO & GENERAL MANAGER	
<b>Kristen Nelson</b>	EDITOR-IN-CHIEF	NEWS 907.522.9469 publisher@petroleumnews.com
<b>Susan Crane</b>	ADVERTISING DIRECTOR	
<b>Heather Yates</b>	BOOKKEEPER	CIRCULATION 907.522.9469 circulation@petroleumnews.com
<b>Marti Reeve</b>	SPECIAL PUBLICATIONS DIRECTOR	
<b>Steven Merritt</b>	PRODUCTION DIRECTOR	ADVERTISING Susan Crane • 907.770.5592 scrane@petroleumnews.com
<b>Alan Bailey</b>	CONTRIBUTING WRITER	
<b>Eric Lidji</b>	CONTRIBUTING WRITER	Petroleum News and its supplement, Petroleum Directory, are owned by Petroleum Newspapers of Alaska LLC. The newspaper is published weekly. Several of the individuals listed above work for independent companies that contract services to Petroleum Newspapers of Alaska LLC or are freelance writers.
<b>Gary Park</b>	CONTRIBUTING WRITER (CANADA)	
<b>Steve Sutherlin</b>	CONTRIBUTING WRITER	
<b>Allen Baker</b>	CONTRIBUTING WRITER	
<b>Judy Patrick Photography</b>	CONTRACT PHOTOGRAPHER	
<b>Forrest Crane</b>	CONTRACT PHOTOGRAPHER	
<b>Renee Garbutt</b>	CIRCULATION MANAGER	

OWNER: Petroleum Newspapers of Alaska LLC (PNA)  
Petroleum News (ISSN 1544-3612) • Vol. 27, No. 23 • Week of June 5, 2022

Published weekly. Address: P.O. Box 231647 Anchorage, AK 99523-1647  
Subscription prices in U.S. — \$118.00 1 year, \$216.00 2 years  
Canada — \$206.00 1 year, \$375.00 2 years  
Overseas (sent air mail) — \$240.00 1 year, \$436.00 2 years

"Periodicals postage paid at Anchorage, AK 99502-9986."

POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

## Bombay Deluxe

*The Spice of Life...*

*Serving the finest Indian Cuisine in Alaska*



Traditional chicken, lamb, seafood dishes  
& Indian naan bread cooked in our  
Tandoor (clay oven).

**Vegetarian Specialties**  
**Delicious Appetizers — Samosas, Pakoras**

**SOUTH ANCHORAGE**  
1120 Huffman Road, Suite 5  
Open seven days a week: 3-9 p.m.  
**907-644-4521**  
[www.BombayDeluxe.com](http://www.BombayDeluxe.com)

**MIDTOWN ANCHORAGE**  
555 W. Northern Lights (Valhalla Center)  
Monday through Friday: 11 a.m.-9 p.m.  
Saturday & Sunday: 12-9  
**907-277-1200**

**Order on-line for pick-up or delivery at [www.FoodOnTheWay.com](http://www.FoodOnTheWay.com)**

continued from page 4

## ANS OUTPUT

from a March average of 37,009 bpd but up 5.3% from an April 2021 average of 34,696 bpd.

Hilcorp Alaska's Northstar averaged 7,760 bpd in April, down 205 bpd, 2.6%, from a March average of 7,965 bpd and down 14.1% from an April 2021 average of 9,032 bpd. Northstar crude averaged 4,313 bpd in April, 55.6% of the field's volume, down 148 bpd, 3.3%, from a March average of 4,461 bpd and down 18.3% from an April 2021 average of 5,279 bpd. Northstar NGLs averaged 3,347 bpd in April, 44.4% of the field's production, down 58 bpd, 1.7%, from a March average of 3,504 bpd and down 8.2% from an April 2021 average of 3,753 bpd.

April production from Savant Alaska's Badami, averaged 986 bpd, down 51 bpd, 4.9%, from a March average of 1,037 bpd and down 24.6% from an April 2021 average of 1,307 bpd. Savant is a Glacier Oil and Gas company.

## Cook Inlet averaged 9,997 bpd

Production from Cook Inlet averaged 9,977 bpd in April, up 518 bpd, 5.5%, from a March average of 9,459 bpd and up 7% from an April 2021 average of 9,321 bpd. Cook Inlet production is 98.6% crude, with just 138 bpd of NGLs, all from the Swanson River field.

The largest month-over-month production increase in the basin was at Hilcorp's Beaver Creek, which averaged 891 bpd in April, up 369 bpd, 70.7%, from a March average of 522 bpd and up 314.5% from an April 2021 average of 215 bpd.

Cook Inlet Energy's Redoubt Shoal averaged 1,132 bpd in April, up 127 bpd, 12.7%, from a March average of 1,005 bpd. The field was not in production in April 2021. CIE is a Glacier Oil and Gas company.

Hilcorp's Swanson River averaged 867 bpd in April (combined crude and NGLs), up 125 bpd, 16.8%, from a March average of 742 bpd and down 11.4% from an April 2021 average of 979 bpd.

Hilcorp's McArthur River averaged 2,870 bpd in

April, up 49 bpd, 1.7%, from a March average of 2,821 bpd and down 16.5% from an April 2021 average of 3,435 bpd.

Hilcorp's Trading Bay averaged 858 bpd in both April and March but was down 20.5% from an April 2021 average of 1,078 bpd.

CIE's West McArthur River averaged 175 bpd in April, down 71 bpd, 28.8%, from a March average of 246 bpd. The field was not in production last April.

Hilcorp's Granite Point averaged 2,423 bpd in April, down 48 bpd, 1.9%, from a March average of 2,471 bpd and down 10.5% from an April 2021 average of 2,709 bpd.

BlueCrest's Hansen field averaged 760 bpd in April, down 33 bpd, 4.1%, from a March average of 793 bpd and down 19.4% from an April 2021 average of 944 bpd.

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

Contact Kristen Nelson at [knelson@petroleumnews.com](mailto:knelson@petroleumnews.com)

continued from page 4

## INLET GAS

down 467 mcf per day, 1.8%, from a March average of 26,354 mcf per day and down 46% from an April 2021 average of 47,954 mcf per day.

Hilcorp's McArthur River averaged 18,577 mcf per day in April, 9% of inlet production, up 73 mcf per day, 0.4%, from a March average of 18,503 mcf per day and down 29.6% from an April 2021 average of 26,380 mcf per day.

Hilcorp's Swanson River averaged 11,561 mcf per day, 5.6% of inlet production, down 1,979 mcf per day, 14.6%, from a March average of 13,540 mcf per day and down 14.6% from an April 2021 average of 18,963 mcf per day.

Furie's Kitchen Lights averaged 11,500 mcf per day, 5.6% of inlet production, down 555 mcf per day, 4.6%, from a March average of 12,056 mcf per day and down 26.4% from an April 2021 average of 15,421 mcf per day.

Hilcorp's Beaver Creek averaged 10,586 mcf per day, 5.1% of inlet production, up 3,274 mcf per day, 44.8%, from a March average of 7,312 mcf per day and down 5.2% from an April 2021 average of 11,164 mcf per day.

Fifteen smaller fields accounted for a combined 16.8% of inlet production.

Hilcorp's Ivan River averaged 9,455 mcf per day, up 673 mcf per day, 7.7%, from a March average of 8,783 mcf per

day but down 9.6% from an April 2021 average of 10,455 mcf per day.

Hilcorp's Cannery Loop averaged 7,006 mcf per day, up 1,953 mcf per day, 38.7%, from a March average of 5,053 mcf per day and up 42.3% from an April 2021 average of 4,923 mcf per day.

AIX's Kenai Loop averaged 3,665 mcf per day in April, down 105 mcf per day, 2.8%, from a March average of 3,769 mcf per day and down 24.2% from an April 2021 average of 4,834 mcf per day.

Hilcorp's Granite Point averaged 3,498 mcf per day in April, down 16 mcf per day, 0.4%, from a March average of 3,513 and down 4% from an April 2021 average of 3,644 mcf per day.

Hilcorp's Deep Creek averaged 3,168 mcf per day in April, up 30 mcf per day, 1%, from a March average of 3,137 mcf per day but down 26.7% from an April 2021 average of 4,322 mcf per day.

Vision Operating's North Fork averaged 3,167 mcf per day in April, down 18 mcf per day, 0.6%, from a March average of 3,186 mcf per day but up 2.9% from an April 2021 average of 3,077 mcf per day.

BlueCrest's Hansen field averaged 1,564 mcf per day in April, down 151 mcf per day, 8.8%, from a March average of 1,715 mcf per day and down 38.8% from an April 2021 average of 2,554 mcf per day.

Hilcorp's Trading Bay averaged 1,224 mcf per day in April, down 210 mcf per day, 14.6%, from a March average of 1,434 mcf per day and down 41.4% from

an April 2021 average of 2,088 mcf per day.

Hilcorp's Lewis River averaged 795 mcf per day in April, down 26 mcf per day, 3.2%, from a March average of 821 mcf per day and down 28.4% from an April 2021 average of 1,111 mcf per day.

Amaroq's Nicolai Creek averaged 364 mcf per day in April, up 361 mcf per day, 12,023.3%, from a March average of 3 mcf per day and up 2.6% from an April 2021 average of 355 mcf per day.

Hilcorp's Seaview averaged 275 mcf per day in April, down 22 mcf, 7.4%, from a March average of 298 mcf per day. The field was not yet in production in April 2021.

Cook Inlet Energy's Redoubt Shoal averaged 225 mcf per day in April, down 8 mcf per day, 3.5%, from a March average of 233 mcf per day. Redoubt Shoal

was not in production last April. CIE is a Glacier Oil and Gas company.

Hilcorp's Nikolaevsk averaged 117 mcf per day in April, down 167 mcf per day, 58.8%, from a March average of 284 mcf per day and down 19% from an April 2021 average of 145 mcf per day.

CIE's West McArthur River averaged 37 mcf per day in April, down 18 mcf per day, 33.3%, from a March average of 55 mcf per day. The field was not in production last April. CIE is a Glacier Oil and Gas company.

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

—KRISTEN NELSON

Contact Kristen Nelson at [knelson@petroleumnews.com](mailto:knelson@petroleumnews.com)

**USecology** Anchorage • Fairbanks • Kenai • Moose Creek • Palmer • Prudhoe Bay

US Ecology offers compliant, environmentally safe, and cost effective solutions for treating and disposing of hazardous materials, including those contaminated with petroleum, oil and lubricants through thermal treatment technology.

Unequaled service. Solutions you can trust.  
[USecology.com](http://USecology.com) (907) 258-1558

**DENALI**  
INDUSTRIAL SUPPLY, INC.

**Fasteners  
& Much, Much More**

**Now open for business  
at our new Anchorage  
location!**  
**4901 Fairbanks St.**

1499 Vanhorn Rd.  
 Fairbanks, Alaska 99701  
**907-452-4524**

4901 Fairbanks St.  
 Anchorage, Alaska 99503  
**907-770-1274**

[www.denali-industrial.com](http://www.denali-industrial.com)

**P | N | D**  
ENGINEERS, INC.

ANCHORAGE AK  
 PALMER AK  
 JUNEAU AK  
 SEATTLE WA  
 PORTLAND OR  
 HOUSTON TX  
 VANCOUVER BC

*Miluveach Bridge | North Slope, Alaska*

**907.561.1011**  
[WWW.PNDENGINEERS.COM](http://WWW.PNDENGINEERS.COM)

*Innovative multidisciplinary engineering services since 1979.*

## EXPLORATION & PRODUCTION

### Hilcorp installs Cannery Loop compressor

Hilcorp Alaska has received approval from the Alaska Department of Natural Resources' Division of Oil and Gas to install a compressor on Pad 3 at the company's Cannery Loop unit on the Kenai Peninsula.

The division approved the amendment of the plan of operations for Cannery Loop May 25. An additional sales compressor at Pad 3 was included in the company's 2021 plan of development, which runs through July 31, 2022. The compressor was planned to be installed in the second quarter to increase throughput.

Cannery Loop is one of Hilcorp's smaller gas fields, averaging 7,006 thousand cubic feet per day in April, the latest month for which the Alaska Oil and Gas Conservation Commission has posted data. Hilcorp has been increasing production from the field, with April production up 38.7% from March and April 2022 production up 42.3% from April 2021.

Work included in the compressor install includes:

- Constructing a foundation for the compressor skid.
- Installing the compressor skid.
- Trenching for tie-in infrastructure.
- Installing tie-in infrastructure and connection to existing infrastructure.

The division is requiring a certified as-built survey of the activity within one year of placement.

—KRISTEN NELSON

### US drilling rig count drops by 1 to 727

The Baker Hughes' U.S. rotary drilling rig count was 727 on May 27, down by one rig from the previous week and up by 270 from 457 a year ago.

When the count dropped to 244 in mid-August 2020 it was the lowest the domestic rotary rig 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 2020 when it gained back 10 rigs.

The May 27 count includes 574 rigs targeting oil, down by two from the previous week and up 215 from 359 a year ago, with 151 rigs targeting natural gas, up by one from the previous week and up 53 from 98 a year ago, and two miscellaneous rigs, unchanged from the previous week and unchanged from a year ago.

Thirty-six of the rigs reported May 27 were drilling directional wells, 666 were drilling horizontal wells and 25 were drilling vertical wells.

#### Alaska rig count unchanged

Oklahoma (59) and Texas (358) were each up by a single rig from the previous week.

Louisiana (61) was down three rigs.

Rig counts in all other states were unchanged week over week: Alaska (8), California (7), Colorado (16), New Mexico (98), North Dakota (36), Ohio (12), Pennsylvania (25), Utah (13), West Virginia (14) and Wyoming (16).

Baker Hughes shows Alaska with eight rotary rigs active May 27, unchanged from the previous week and up by four from a year ago, when the state's rig count stood at four. Seven of the rigs in Alaska were onshore, one was offshore — also unchanged week over week.

The rig count in the Permian, the most active basin in the country, was down by one from the previous week at 342 and up by 109 from 233 a year ago.

—KRISTEN NELSON

**Baker Hughes shows Alaska with eight rotary rigs active May 27, unchanged from the previous week and up by four from a year ago, when the state's rig count stood at four.**

continued from page 2

### ENERGY CONFERENCE

would be one thing. But it's not. Many utilities in the Lower 48 have the same problem," Grahame said.

Hydroelectric generating capacity in the West has been reduced by the current drought conditions, which have lowered reservoirs so they can't provide as much peak power as they did in wetter years. Coal plants have been shut down to reduce emissions. The margin is thinner.

"My personal view is that if there are long periods of very hot days this summer, we're all going to see brownouts," she said "because the energy simply isn't there and it's due to the shutdown of coal plants, and it's due to the fact that it is very difficult to build new gas plants or even to expand the capabilities for capacity of existing gas plants. So that's the reality and that's what reliability looks like to me right now."

#### New peak capacity coming

NorthWestern is working on two new gas fired generating facilities to provide peak power.

One of them, in Yellowstone County, would provide 175 megawatts of peak generation. Work started on that last month, but the planned completion in late 2023 could be delayed due to a lawsuit by environmental groups challenging its air quality permit.

The company has nearly finished a 58 MW natural gas plant in Huron, S.D., with total construction costs of about \$86 million. That should go online soon.

In addition, NorthWestern is planning a battery storage facility of 50 megawatts, but that's in early stages.

Overall, Lower 48 utilities provide about 40 percent "carbon-free" electricity from hydro, wind, solar and nuclear generation, so 60 percent is produced by burning fossil fuels, she noted.

The electricity generating segment produces 25 percent of the nation's emissions of greenhouse gases, with 27 percent coming from transportation, 24 percent from industry, 13 percent commercial and residential, and 11 percent from agriculture, according to the U.S. Environmental Protection Administration.

#### Careful innovation

NorthWestern has been a leader in reducing emissions, she said, and in

Montana the company was approaching 70 percent of its power generation from sources that don't produce greenhouse gases. The company has a commitment to be a net zero emitter by 2050.

The company is moving ahead toward that goal, but not with cutting edge way-out experimental projects.

"We're not going to make big bets on untested technology because that's not what our customers want us to do and not what our shareholders and stakeholders want us to do," she said. "At the same time, we're not waiting for technology to develop the ultimate solution.

"We are making small bets. We engage in pilot projects. So, for example, five years ago we got together with the City of Bozeman and we instituted a solar project and right now I think we power 50 or 60 homes in Bozeman with solar.

"More recently, we have been experimenting with different kinds of batteries and employing them in conjunction with solar or a number of other sources to see how we can improve rural reliability," she said.

Montana has harsh winters, so "one of the kinds of batteries we're experimenting with is called a super capacitor. And it appears to have much greater capability to withstand very cold temperatures and so we have deployed super capacitors in Yellowstone National Park, which has very cold temperatures, similar to Alaska, and the batteries seem to be doing extremely well," she reported.

#### Rural solar projects

"We're deploying different network technologies, a number of different designs in our rural areas to the point where we are now planning next year on setting up 50 or 60 communities in Montana with a combination of battery and solar or just battery. That's going to save our customers a lot of money, and especially when partnered with solar it's going to further our sustainability."

Grahame is General Counsel and Vice President of Regulatory and Federal Government Affairs for NorthWestern Corp., which does business as NorthWestern Energy and has its headquarters in Sioux Falls, S.D. The company had revenues of just under \$400 million in the first quarter of this year. Net income was \$59 for the quarter. The company trades on the NASDAQ. ●

Contact Allen Baker through publisher@petroleumnews.com



**Keeping you covered.**

To subscribe to Petroleum News, contact Renee at 281.978.2771

**Petroleum**  
NEWS  
petroleumnews.com



**PRICE GREGORY**  
A QUANTA SERVICES COMPANY

Thousands of **Miles of Experience**

Committed to **Client Satisfaction**

Dedicated to **Safety Excellence**

Pipeline Construction & Maintenance | EPC Contracting | Powerplant Construction | General Contracting

Anchorage | Deadhorse | 907.278.4400 | www.pricegregory.com

continued from page 1

## INSIDER

because of its immense size.

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

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

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.)

The largest mobile land rig in North America, Doyon Rig 26 drilled CD2-310 to a total measured depth of 35,526 feet on April 11, making it the longest North American land based well.

Doyon Rig 26 is a technologically advanced rig, capable of drilling in excess of 40,000 feet, which substantially extends the reach from a single pad.

That means the rig will be able to develop 154 square miles of reservoir from a 14-acre drilling pad versus 55 square miles using today's conventional rigs. CD2-310 was the first well drilled by the rig.

The Fiord West Kuparuk development "opens a new era we call 'growth without gravel' where we can use extended reach technology to access 60% more acreage from a single pad, dramatically reducing our footprint and enabling us to safely produce from environmentally sensitive areas," CPAI President Erec Isaacson said May 20.

Technology has been at the heart of CPAI's greening of its oil fields on the North Slope.

### Exits from ANWR not sign of disinterest

IN LATE 2021 LEASE operator Chevron and 50% partner Hilcorp relinquished their mid-1980s 92,000-acre lease on Native acreage in the (structural) eastern region of the ANWR 1002 Area.

And more recently Regenerate Alaska, a subsidiary of 88 Energy, asked the Biden administration to cancel their U.S. Bureau of Land Management leases issued by the Trump administration on Jan. 20, 2021 in the (stratigraphic) western region of the 1002 Area, as well as to refund their bonus bid and first year rental fees, which was done by the National Resources Revenue office.

The Biden administration suspended oil and gas leases in the ANWR 1002 Area on June 1, 2021.

When Congress created the 19 million acre Arctic National Wildlife Refuge in 1980, it set aside 1.57 million acres of coastal plain for resource development, known as Area 1002, after a section of the law.

To date, only one well has been drilled in the 1002 Area. Chevron and BP partnered in the mid-1980s on the 15,193-foot KIC No. 1 well, drilling the \$40 million well over two winter seasons on their 92,000-acre lease. Arctic Slope Regional Corp. owns subsurface rights at the lease and local village corporation Kaktovik Inupiat Corp. owns surface rights. The KIC well was named after the village corporation.

In the three decades since, the KIC No. 1 well has become mythic for its secrecy. Only select people at Chevron, BP and ASRC, as well as a few State of Alaska geoscientists, are believed to have seen the well results.

But the companies defended the well's confidentiality in court and hung onto their lease for nearly 40 years.

And those few people who are known to



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

have seen the KIC well's results and have spoken out publicly, have all supported opening the 1002 Area to exploration drilling.

When the two companies renewed the KIC No. 1 lease in 1999, then-Exploration Vice President for BP Exploration Alaska Neil Ritson said in a press release, "ANWR offers the greatest potential for a world-class oil discovery on the North Slope.

Quoted in the same release, then-Exploration Manager for Chevron Dave Birsa said what state geoscientists have continued to echo: "The ANWR coastal plain ... is on trend with the prolific oil fields of the central North Slope and has

significant geological potential."

Ken Boyd, a former director of Alaska's Division of Oil and Gas and known to have been privy to the KIC well results, as well as a member of the industry team that designed the only seismic program shot in the 1002 area (winter 1983-84), won't talk about the results, but a few years later he did talk about what he called "common sense" trendology.

"Trendology clearly shows that the Barrow Arch is pointing right at ANWR. ... And, if it is, just on the basis of this trend, you'd have to be nuts to look at that and say the oil must stop right here, on the edge of ANWR," Boyd said.

"The Barrow Arch has proven to be the major oil feature in Alaska since the discovery of Prudhoe Bay," Boyd said.

Congress set aside the 1002 Area "because it's on-trend with some of the biggest oil fields in North America," he said.

Over the course of its existence, the ANWR 1002 Area has become a symbol in the debate over American energy and environmental policy. Those opinions are increasingly aligned with parties.

What reason did Chevron formally give for releasing the 92,000-acre lease?

"Chevron's decision to formally relinquish its legacy lease position was driven by the goal of prioritizing and focusing our exploration capital in a disciplined manner and in the context of our entire portfolio of opportunities."

ASRC's statement said "the current political environment" forced the companies to give up their leases.

"ASRC remains committed to the development of our lands in the 1002 Area. ... We will continue to work with the residents in Kaktovik — the only community in ANWR — and our strategic partners to safeguard the economic future of our communities."

—Oil Patch Insider was written by Kay Cashman

nabors.com

**Safer. Smarter.**

**Better.**

Our CDR2-AC rig reflects the latest innovations in Arctic drilling to provide our customers with incident free performance and operational and technical excellence.

CDR2-AC is the first Arctic rig designed and built by Nabors specifically for Coil Tubing Drilling operations. The rig was built to optimize CTD managed pressure drilling to provide precise control of wellbore pressures for improved safety, decreased costs, and increased wellbore lengths.

Combining safety and environmental excellence with greater efficiency means CDR2-AC can deliver the high value results customers have come to expect from Alaska's premier drilling contractor.

**Learn more about Nabors' new drilling technologies at Nabors.com.**

 **NABORS – MISSION TO ZERO**  
Safer, Smarter - Incident Free

# NEED TO STRETCH YOUR DOLLAR?

## Becoming a contracted advertiser

To become a Petroleum News 'contracted advertiser' you simply have to agree to run 12 ads of any size over a 12-month period. In return we'll give you this additional marketing exposure:

### Exposure in the weekly Petroleum News

- You make the List
- Your employees are spotlighted
- Your news gets in Oil Patch Bits

OIL PATCH BITS



BUSINESS SPOTLIGHT



### Exposure in the semiannual Arctic Oil & Gas Directory

COMPANY LIST



STANDALONE PHOTOS



- Your news gets featured
- Company photos promote your business
- You're included in the buyer's guide

LISTINGS SECTION

NEWS ITEMS

PHOTO FEATURES



CO-OP ADVERTISEMENTS

## Exposure in co-op ads for your customers

As a contracted advertiser your company would be listed in the co-op ads that run at least 12 times a year in Petroleum News, congratulating oil companies for new discoveries, field start-ups, entering Alaska, and welcoming new oil company presidents or managers to the state.

## If your annual contract exceeds \$7,100

We'll profile your company We'll work with you on a two-page Q&A company profile that will appear in the Arctic Oil & Gas Directory. Afterwards, you can frame it or use it as a company brochure or flyer.

We'll give you free online advertising When Petroleum News readers click on articles each week they will see your ad, which will appear in rotation on the current story pages. The size of your annual contract determines the size of your online ad.

COMPANY PROFILES



WEB ADS





continued from page 1

## KENAI UPGRADES

The plans also involve the installation of energy storage systems on the Kenai Peninsula, to improve the stability of power supplies over the grid.

### Dixon Diversion Project

As previously reported by Petroleum News, AEA has recently decided to move forward with planning the Dixon Diversion Project, a project that could increase the power output of Bradley Lake by almost 50 percent. Use of this increased power output would require significant upgrades to the Kenai Peninsula transmission system, as envisioned in the transmission upgrade projects.

AEA also commented that the upgrades to the transmission grid will facilitate the integration of new renewable energy generation into the electrical system. Moreover, the increasing use of cost-saving power sales between utilities, together with the imminent implementation of regional integrated resource planning for the electrical system, strengthen the case for transmission system upgrades, AEA said.

“These projects will be the initial phase of some of the most significant improvements to the Railbelt electrical grid in Alaska’s history,” AEA said.

The planned work also involves a study into the possibility of constructing a second transmission path for shipping electricity between the Kenai Peninsula and Southcentral Alaska — the current transmission line that connects the peninsula to Anchorage via the northern side of the Turnagain Arm represents a single point of failure in the system and constrains the amount of power that can be shipped from or to the peninsula.

A number of years ago AEA suggested the installation of

*Bradley Lake is owned by AEA and managed by Bradley Lake Project Management Committee, with representatives from each of the five Railbelt electric utilities and AEA.*

an undersea high voltage direct current transmission line between the northwest Kenai Peninsula and the old Beluga power station on the west side of the Cook Inlet.

### Funding the projects

Bradley Lake is owned by AEA and managed by Bradley Lake Project Management Committee, with representatives from each of the five Railbelt electric utilities and AEA.

Given that the proposed transmission upgrades will support the Bradley Lake system to the benefit of electricity ratepayers, the BPMT has obtained approval to use bond funding associated with Bradley Lake to underwrite the \$200 million cost of the upgrades, at no additional cost to ratepayers.

Essentially, although the bonds associated with the construction of Bradley Lake were paid off in 2021, under the terms of the power sales agreement for Bradley Lake, the utilities have continued to make annual payments associated with the debt service — those additional funds are now available for the transmission upgrades.

### Support from Dunleavy

“With this historic upgrade to transmission lines, the Railbelt utilities and AEA are ushering in a new energy future in Alaska,” said Gov. Mike Dunleavy in reference to the planned Kenai Peninsula transmission upgrades. “By

improving the Railbelt’s transmission capacity, more of the power from the Bradley Lake Hydroelectric Project — the lowest cost energy in the state — will power Alaskan’s homes and businesses from Homer to Fairbanks.”

Dunleavy also commented that the transmission upgrades would prepare the grid for the increased use of sustainable energy sources such as tidal, geothermal, solar, hydropower, wind and hydrogen.

“Early in his administration, Gov. Dunleavy met with AEA and the utilities and asked them to develop a plan to increase the reliability and resiliency of the Railbelt corridor,” said AEA Executive Director Curtis Thayer. “Working together this is the cornerstone of those efforts to achieve a more resilient system driven by low or zero carbon energy that supports a strong economy.”

“As the largest electric utility in Alaska, these investments come at a critical time for our members,” said Chugach Electric Association acting CEO Arthur Miller. “These projects increase the value of Bradley Lake to all consumers in the Railbelt from both a cost and reliability perspective and support the advancement of renewable generation for decades to come.”

A more integrated approach to the overall management of power generation and transmission in the Railbelt is also in the offing, with moves to implement an electric reliability organization for the region, to oversee the planning of the electrical system, open access to the system, and the use of a consistent set of reliability standards.

The Regulatory Commission of Alaska is currently considering an application by the Railbelt Reliability Council to form an ERO. ●

Contact Alan Bailey  
at [abailey@petroleumnews.com](mailto:abailey@petroleumnews.com)



## Oil Patch Bits



### Coffman announces Justin Freeman as VP of CCUS

Coffman Engineers Inc., a nationally recognized multidiscipline engineering firm, said May 31 that it welcomes Justin Freeman as its vice president of carbon capture utilization & storage and hydrogen. Freeman joins Coffman at a pivotal time as the company prioritizes the importance of decarbonization by helping its clients reach their carbon goals.

Freeman leads Coffman’s companywide initiative spearheading the CCUS and hydrogen market strategy, the development of internal capabilities, and managing CCUS and hydrogen projects across the country.

With a degree in mechanical engineering from the University of Colorado in Boulder, his background includes successfully developing and managing a CCUS program for a multinational corporation, managing international giga projects, and leading business units through process transformations.

Freeman has a deep understanding of the oil and gas industry and the application of CCUS and hydrogen solutions to decarbonize market sectors cost-effectively.

Freeman explained, “Electrification and renewables are a great start to the energy transition, but in order for the whole economy to decarbonize, we will need to deploy CCUS and hydrogen in hard-to-abate market sectors to achieve net zero.”

Coffman can assist clients with their carbon goals, supported by decades of experience in the industrial and oil and gas industries. Coffman’s CCUS and hydrogen services are also complemented by capabilities in renewable power, battery storage, and other alternative energy technologies.

For Freeman’s complete bio visit [www.coffman.com/team\\_members/justin-freeman/](http://www.coffman.com/team_members/justin-freeman/).



JUSTIN FREEMAN

## Companies involved in Alaska’s oil and gas industry

ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	
<b>A</b>			<b>N-P</b>			
ABR, Inc. ....	4	Computing Alternatives		Matson		
Acuren		CONAM Construction				
Ahtna, Inc.		Construction Machinery Industrial (CMI)				
Airgas, an Air Liquide Company		Cook Inlet Tug & Barge		Nabors Alaska Drilling .....	7	
Airport Equipment Rentals		Cruz Construction		NANA Worley .....	11	
Alaska Dreams		Denali Industrial Supply, Inc. ....	5	Nature Conservancy, The		
Alaska Frontier Constructors (AFC)		Denali Universal Services (DUS)		NEI Fluid Technology		
Alaska Fuel Services		Doyon Anvil		Nordic Calista		
Alaska Marine Lines		Doyon Associated		North Slope Borough		
Alaska Materials		Doyon Drilling		North Slope Telecom		
Alaska Railroad		Doyon, Limited		Northern Air Cargo		
Alaska Rubber Group		EEIS Consulting Engineers, Inc.		Northern Solutions		
Alaska Steel Co.		EXP Energy Services		Oil Search		
Alaska Textiles		F. R. Bell & Associates, Inc.		Owl Ridge Natural Resource Consultants		
Alaska West Express		Flowline Alaska		Petroleum Equipment & Services, Inc.		
Arctic Controls		Frost Engineering Service Co. – NW		PND Engineers, Inc. ....	5	
ARCTOS Alaska, Division of NORTECH		<b>G-M</b>			PRA (Petrotechnical Resources of Alaska)	
Armstrong .....	3	GCI		Price Gregory International .....	6	
ASTAC (Arctic Slope Telephone Assn. Coop, Inc)		GeoLog		<b>Q-Z</b>		
AT&T		Greer Tank & Welding		Resource Development Council		
Automated Laundry Systems & Supply		Guess & Rudd, PC		SeaTac Marine Services		
Avalon Development		Inspirations		Strategic Action Associates		
<b>B-F</b>			Judy Patrick Photography .....	Surepoint Technologies Group US		
Bombay Deluxe Restaurant .....	4	Little Red Services, Inc. (LRS)	12	Tanks-A-Lot		
Brooks Range Supply		Lounsbury & Associates .....	11	TorcSill		
C&R Pipe & Steel, Inc.		Lynden Air Cargo		Udelhoven Oilfield System Services Inc.		
Calista Corp.		Lynden Inc.		US Ecology Alaska .....	5	
ChampionX		Lynden Logistics		Weston Solutions .....	10	
Coffman Engineers		Lynden Oilfield Services		Wolffpack Land Co.		
Colville Inc.		Lynden Transport				
		Maritime Helicopters				

All of the companies listed above advertise on a regular basis with Petroleum News

continued from page 1

## ENSTAR SALE

the United States. Its existing utilities are in Canada, with rate-regulated distribution and transmission assets in Alberta, British Columbia and Nova Scotia. The company also owns 33.33% equity interest in the utility delivering natural gas in Inuvik, Northwest Territories, and Renewable Energy, including the Bear Mountain Wind Park, and has approximately 10% indirect interest in the Northwest Hydro Facilities.

Apex Utilities Inc. in Alberta serves some 81,900 customers, primarily residential and small commercial consumers in smaller population centers or rural areas in Alberta.

TriSummit owns Pacific Northern Gas, PNG, in the

west central portion of northern British Columbia. A wholly owned subsidiary of PNG owns and operates distribution in northeastern British Columbia.

TriSummit said PNG serves some 42,300 customers, approximately 87% of which are residential.

### The transition

TriSummit said Enstar will continue to operate as a standalone utility, “preserving its corporate identity and providing the same safe, reliable and affordable service to its customers.” TriSummit said it will retain Enstar’s “dedicated employees and hire new Alaska employees to perform certain functions currently performed out of State.”

Jared Green, TriSummit’s president and CEO, is a former president of Enstar, named to that position in 2014.

He said the companies have similar dedication and culture. Enstar’s “solid track record” makes the company “an

excellent fit for our company,” he said.

Green said TriSummit’s top priority is a smooth transition, maintaining Enstar’s strong relationships in its communities and to support Enstar in continuing to provide safe, reliable and affordable service.”

TriSummit said the acquisition “significantly enhances TriSummit’s position as a premier growing North American utility and renewable energy company.”

AltaGas said that following its divestiture of the Alaska utilities its remaining utilities will be concentrated in the Eastern U.S., including Maryland, Virginia, Michigan and the District of Columbia.

—KRISTEN NELSON

Contact Kristen Nelson  
at knelson@petroleumnews.com

continued from page 1

## PROPANE SALES

to ultimate recovery” from the use of propane to blend MI and said sale of natural gas liquids to Kuparuk and residue gas to Northstar “provides clear and substantial improvements in ultimate recovery from these units while having a negligible effect on recovery in the PBF (Prudhoe Bay field).”

BP Exploration (Alaska), then operator at Prudhoe, had argued that the existing system did not result in waste.

On May 19 the current Prudhoe operator, Hilcorp North Slope, asked the commission to amend Other Order No. 075 “to document the current understanding of Prudhoe Bay Unit (‘PBU’) impacts in the event of propane sales.”

Hilcorp said the Prudhoe owners now want to explore the market to sell propane — but at a volume of 200 to 1,000 barrels per day, not the 2,500 bpd being discussed 10 years ago.

### ANGDA request for propane

The 2011 request was from Harold Heinze, who asked AOGCC to investigate whether reinjection of gas containing propane instead of making propane available for sale constituted waste.

Heinze’s petition stemmed from his time as head of the Alaska Natural Gas Development Authority, which had pushed for use North Slope propane to alleviate high fuel oil and diesel costs in rural Alaska. ANGDA proposed wholesale propane distribution from a distribution point tapping into the North Slope’s propane resource, with a primary rural distribution point where the North Slope Haul Road crosses the Yukon River and propane tanks carried by barge along the Yukon.

In October 2011, when he was president and CEO of ANGDA, Heinze told Petroleum News the authority wanted to see a wholesale delivery point established at the

Central Gas Facility on the North Slope, with propane pulled from the gas stream passing through that facility. He said the CGF already cooled down Prudhoe gas to extract propane and other natural gas liquids used for enhanced oil recovery and that are mixed with crude for delivery to market.

Heinze said some 75,000 barrels per day of propane remained mixed with the natural gas and was re-injected at Prudhoe. He told PN that ANGDA believed at least two of the three Prudhoe Bay unit owners were ready to sell propane (major owners in 2011 were BP Exploration (Alaska), the operator, ConocoPhillips and ExxonMobil Production Co.; Chevron had a small stake in the field).

Heinze announced his resignation from ANGDA in November 2011, effective the first day of the 2012 legislative session. The authority’s future was then uncertain, because in addition to Heinze’s departure, it did not have the four appointed board members it needed for a quorum.

In 2013 ANGDA was merged with the Alaska Gasline Development Corp. and the ANGDA board eliminated.

### Petition to AOGCC

Heinze petitioned AOGCC as a private citizen. He said he was concerned that from 500 to 2,000 barrels per day of recoverable propane at the Prudhoe CGF wasn’t being used.

He told the commission his major concerns were that the CGF had the capacity — which he said wasn’t being utilized — to recover 500 to 2,000 barrels per day of propane. He said some propane was “beneficially used for EOR in the PBU, but there is an even larger volume of propane being injected as residue gas” and because the production life of Prudhoe was “limited ... the propane that could be recovered and marketed at this time will be left in the reservoir at shut down. That future lost recovery is the preventable waste of a valuable hydrocarbon.”

In its 2012 order the commission included in its findings — based on an increase in the extraction of propane from the gas stream — that “new separation equipment

that could be operated at less than -50 degrees F” would be required. “The estimated cost of such equipment would be substantial. Installation of such equipment would require a six to eight month shutdown.”

### Current request

The commission has tentatively set a hearing on the request to amend the order for June 30 at 10 a.m. in its Anchorage offices.

In a notice of the hearing AOGCC said “Hilcorp and its partners in the PBU are investigating the possibility of commencing propane sales from the PBU and are seeking to update Other 75 to reflect the differences in field operations, and potential scope of a propane sales project, that have occurred in the decade since Other 75 was issued.”

In its May 19 request to amend Other Order No. 075, Hilcorp said the Prudhoe working interest owners “want to explore the market to sell propane to interested wholesale buyers outside of the PBU. The Alaska market demands high volumes of propane and large amounts are currently being imported from Canada and the lower 48 states. Creating an additional source of local supply benefits all Alaskan consumers.”

Hilcorp said some of the findings in the 2012 order “are no longer factually accurate based on the impact of field development over the last 10 years.” Another change is that NGLs are no longer being sold to Kuparuk, increasing the amount of MI available at Prudhoe.

Hilcorp said the Prudhoe owners “are continuing to work with interested wholesale buyers to potentially sell volumes of propane up to facility maximum capacity limits,” currently some 600 barrels per day with the potential of increasing to 1,000 bpd or more “with facility modifications.”

—KRISTEN NELSON

Contact Kristen Nelson  
at knelson@petroleumnews.com

continued from page 1

## SUSITNA ACCESS

### Critical for access

AIDEA said that the road forms a critical component of the West Susitna Access Project, a project to leverage the economic potential of the West Susitna region. Currently the region has no road access.

Potential resource development opportunities include forestry, agriculture, mining and recreational activities. The Susitna Valley has natural gas

resources, with some possibility of oil resources on the east side of Mount Susitna.

A state report published in 2014 indicated that the region is one of the richest resource regions in Alaska and that a road would provide access to billions of dollars of stranded resources, AIDEA said.

“Alaska is a resource state, and the constitution requires us to evaluate how to maximize the use of our resources to benefit all Alaskans,” Gov. Mike Dunleavy has commented. “If built, the proposed West Susitna Road Project

would mean much more than extracting the state-owned minerals essential for a modern economy, and the family-wage jobs it creates for Alaskans. It would also mean new recreational opportunities for Alaskans and thousands of additional acres of land available for agriculture to help our state be more food secure.”

### Working with borough

AIDEA has been working with the Matanuska-Susitna Borough on the West Susitna Access Project for several years and in 2019 agreed on a framework for a

phased feasibility analysis for the project. Since the 1980s the borough has been working on a plan for access to the borough’s western region and has established some natural resource management areas in the region.

In October 2021 the AIDEA board approved the receipt of \$8.5 million in state funding to continue a feasibility study for the West Susitna Access Road Project.

In December 2021 the Matanuska-Susitna Assembly passed a resolution supporting AIDEA’s continuing permitting and predevelopment work for West Susitna access.

And in April of this year the borough completed an extensive program of outreach to the public regarding the project.

AIDEA says that the Army Corps of Engineers will now evaluate AIDEA’s permit application and determine when to begin the compliance process under the National Environmental Policy Act. The NEPA process will include opportunities for public comment and input from stakeholders in the project.

—ALAN BAILEY

Contact Alan Bailey  
at abailey@petroleumnews.com

## No one understands Alaska better.

LOCAL TEAMS SOLVING LOCAL CHALLENGES WITH A GLOBAL PRESENCE.

Project Design and Management • Regulatory Expertise • Incident Response • Construction Oversight • Habitat Restoration



Contact: Rick Farrand (907) 343-2705 • www.westonsolutions.com  
Providing integrated environmental and engineering solutions for the oil and gas industry



continued from page 1

## HILCORP UPDATES

Sept. 10, 2021 when Saugier mentioned the potential of repurposing the company's Cook Inlet platforms that were no longer in production for use in tidal power generation. This occurred when he and three of his people were updating the Cook Inlet Regional Citizens Advisory Council board. Saugier told board members the company intends to extend the life of its Cook Inlet oil and gas fields and other assets as long as possible, particularly its (12) offshore platforms. He said the platforms were built like battleships, noting Cook Inlet was ranked fifth in the United States for tidal power.

• In Saugier's most recent comments on a panel at the sustainability conference, he mentioned Hilcorp's tidal power "demonstration project" in Cook Inlet.

### Tidal power potential "tremendous"

"Cook Inlet has some of the largest and most extreme tides of anywhere in the world. We have been working with the National Renewable Energy Laboratory, NREL, in Golden, Colorado, as well as a number of other entities looking at the ways to utilize the tidal resource for tidal power generation.

"It turns out that the potential is tremendous. And so while we are normally very focused on our core business, which is being the best operator of late-life oil and gas assets, I think there is a unique set of circumstances in the Cook Inlet making this something we should pursue," Saugier said.

(NREL is a federally funded research and development center sponsored by the U.S. Department of Energy and operated by the Alliance for Sustainable Energy, a joint venture between MRIGlobal and Battelle.)

### Ice, rip tides, high winds

Cook Inlet, which has a huge tidal range, is a very harsh environment and Saugier thinks that environment is the "biggest hurdle" to a tidal power project.

Hilcorp, he told conference attendees, is "very familiar" with that environment.

"We operate in the Cook Inlet every day of the year. Ice, no ice, ripping tides, high winds, we're out there, we've got boats running to keep operating.

"So we can actually take on some of these tidal power test projects with no meaningful increase in our footprint activity levels. That's something unique we bring to the table," Saugier said.

### Restarting Agrium plant

There is enough potential tidal power in

Cook Inlet to meet the total energy needs of Southcentral Alaska, he said.

"So then you can really spin it up as a feedstock. What do you do with all the extra energy? We're thinking about that.

"You could crack water into hydrogen and oxygen and now you've got green hydrogen. You could use green hydrogen to restart the Agrium plant and create green ammonia, for which there is tremendous demand."

When asked how expensive tidal power projects are, Saugier said, "I don't know how expensive tidal projects are. That's part of what we're trying to learn in the next couple of years with the demonstration project."

### No natural gas crisis

Is there a natural gas shortage in Southcentral Alaska, the largest population area of the state?

Saugier says no.

"There's not a crisis of natural gas. We have enough gas for the next five years. The Lower 48 is talking about rolling brownouts and that's a shame. And that reflects mismanagement.

"We don't have that situation here in Alaska. I think we can avoid that if we act with a sense of urgency to diversify our energy mix. So we're here to be part of that solution," he said.

"This may surprise you, but what I'm advocating for is you should buy less of my gas. In fact, you should have other sources of energy," Saugier said.

"We are very supportive of any and all other sources of energy — tidal power, solar power, and the other natural gas producers in the Cook Inlet."

Gas from the North Slope would also be "a good thing," he said.

### Looking back 10 years

Looking back to 2012 when Hilcorp first began operating in the Cook Inlet basin, Saugier said, "We didn't really know much about the inlet gas market, but we learned quickly that it's very unique. It's a closed system. There is no gas coming in from the Lower 48 or from anywhere else, not even from the North Slope.

"We learned that there were a very few number of players, and at that time we were one of the smallest players in the business.

"The thing that I learned very quickly that it was really, really important that we deliver on the commitments that we had made as a company. What we stepped into when we acquired our first set of assets up here was a set of commitments by a predecessor company that we were on the hook for.

"I remember taking phone calls on New Year's Day whether or not we should pro-

duce our wells at a certain rate because we needed the gas. Of course the question was always 'do we have a choice? And the answer was 'always no,'" Saugier said.

Over the next 10 years Hilcorp continued to grow in the state of Alaska to the point that today it is the largest producer of natural gas for Southcentral Alaska.

"We're the largest by quite a bit. And not only are we the largest producer of natural gas, but natural gas is really the only fuel that is used for generating heat and electricity in Southcentral Alaska," Saugier said.

"It has been a good 10 years for us as a company and a good 10 years for Southcentral Alaska. Remember, in 2011 there was talk of brownouts and what you should do if the power goes out and that's gone now. I think all of the producers in the Cook Inlet basin should be very proud of that, as well as our utility partners. It's been a good working relationship," he said.

As Hilcorp's assets continue to get older, Saugier said, "it becomes more and more difficult to acquire the necessary permits to carry on business activities to mediate the maturing natural gas supplies. But that's okay; that's the nature of the business.

"So, we continue to be committed to supplying natural gas that we have promised to supply. We continue to invest hundreds of millions of dollars... and continue to have very, very high levels of activity."

### Commercializing diversification

The greatest challenge from Hilcorp's perspective, Saugier said, was that the "capital stack" on renewable power generation projects was "quite different from what you see in upstream oil and gas projects.

"What do I mean by that? When you look at utility-scale projects, particularly green projects, you're frequently financed with grant money and maybe tax credits and that's a very, very low interest debt — my friends in the commercial power space tell me, like 1-2%, at least it was some time ago. ... And a tiny sliver of equity down there at the bottom.

"That's not how upstream oil and gas works. No one wants to lend us money, and they certainly don't want to lend us cheap money. So our capital stack looks very different. It's mostly equity with an expensive debt layer," he said.

What that means is renewable power projects are not competitive inside Hilcorp's portfolio, Saugier said.

"So we're thinking about that, but that's just a financial problem. We can solve that after we've solved the technical problems."

### Alaska's lower carbon footprint

"As far as getting better every day, this is something that is very important to us," Saugier said.

Hilcorp is committed to spending "millions and millions of dollars in 2022 to reduce our carbon footprint" company-wide, he said.

What was interesting, he said, was that the oil and gas industry in Alaska has a much lower carbon footprint than in the Lower 48.

"We don't have leaky pipelines up here like they do in the Lower 48. And we don't have giant flares where we're flaring our natural gas instead of capturing it. We're utilizing it or reinjecting it. ... we're not venting natural gas. None of that exists up here."

### Carbon capture challenged

In regard to carbon capture, Saugier said Hilcorp operates the largest carbon capture sequestration project in the U.S. in central Texas.

"Carbon capture is very challenged. Our experience is on the sequestration side. ... It's not that difficult. It's well within the known technology. What has been more problematic is ... the carbon capture side," Saugier said.

"You hear companies talking about capturing carbon from the gas stream ... it is extraordinarily difficult. It is a complex process. It's not terribly well understood. It's very energy intensive. Our partners who are undertaking the carbon capture process actually had to build a separate power plant just to power the carbon capture train.

"And it's finicky. It goes down all the time, so it's challenging. It doesn't mean it can't be done. This is really the first one that has been attempted. The technology is going to continue to get better, but we're not there yet," Saugier said. ●

*Author's note: Houston-based Hilcorp entered the Cook Inlet basin in mid-2011 and began operating there in 2012 with the acquisition of Chevron's aging Cook Inlet basin assets, including interest in 10 offshore platforms, oil and gas fields, Union Oil contracts, gas storage facilities and interest in Cook Inlet Pipe Line Co. and Kenai Kachemak Pipeline. Next Hilcorp acquired Marathon's gas fields and most recently the North Cook Inlet field from ConocoPhillips. Hilcorp owns and operates its oil and gas fields with the exception of the Beluga River field, which is operated by Hilcorp but jointly owned with Chugach Electric Association.*

Contact Kay Cashman at [publisher@petroleumnews.com](mailto:publisher@petroleumnews.com)

**LOUNSBURY & ASSOCIATES**  
ESTABLISHED 1949  
Surveyors • Engineers • Planners

**PARTNERS IN QUALITY GROWING TOGETHER**

Surveying • Engineering • GIS • Oil & Gas

experience you can use  
ESTABLISHED 1949

[www.lounsburyinc.com](http://www.lounsburyinc.com)

**NANAWorley**  
[nanaworley.com](http://nanaworley.com) | [in](#) [f](#)

- Engineering & Design
- Project Management
- Procurement & Logistics
- Construction Support
- Laser Scanning
- Project Support Services
- Controls, Scheduling, Estimating

continued from page 1

## OIL PRICES

and that it is “not in their interests to lose control of oil prices.”

### June 2 meeting

OPEC scheduled its 29th OPEC and non-OPEC Ministerial Meeting June 2 to agree on a path forward for increasing production to meet the post-pandemic rise in demand.

The group was expected to rubber stamp its preplanned 400,000-barrel increase; however, the Russian situation is sure to fan lively debate at this month's meeting.

Brent and WTI slid more than 2% lower in early trading June 2 as Petroleum News went to press.

On May 27, oil notched a fifth straight weekly gain for its highest prices since early March, reflecting tight fuel inventories as the U.S. summer driving season kicked off with the Memorial Day weekend.

ANS rose \$1.02 May 27 to close at \$120.73, as WTI rose 98 cents to close at \$115.07, and Brent jumped \$2.03 to close at \$119.43.

On May 26, ANS jumped \$3.10 to close at \$119.71, WTI leapt \$3.76 to close at \$114.09, and Brent vaulted \$3.37 to close at \$117.40.

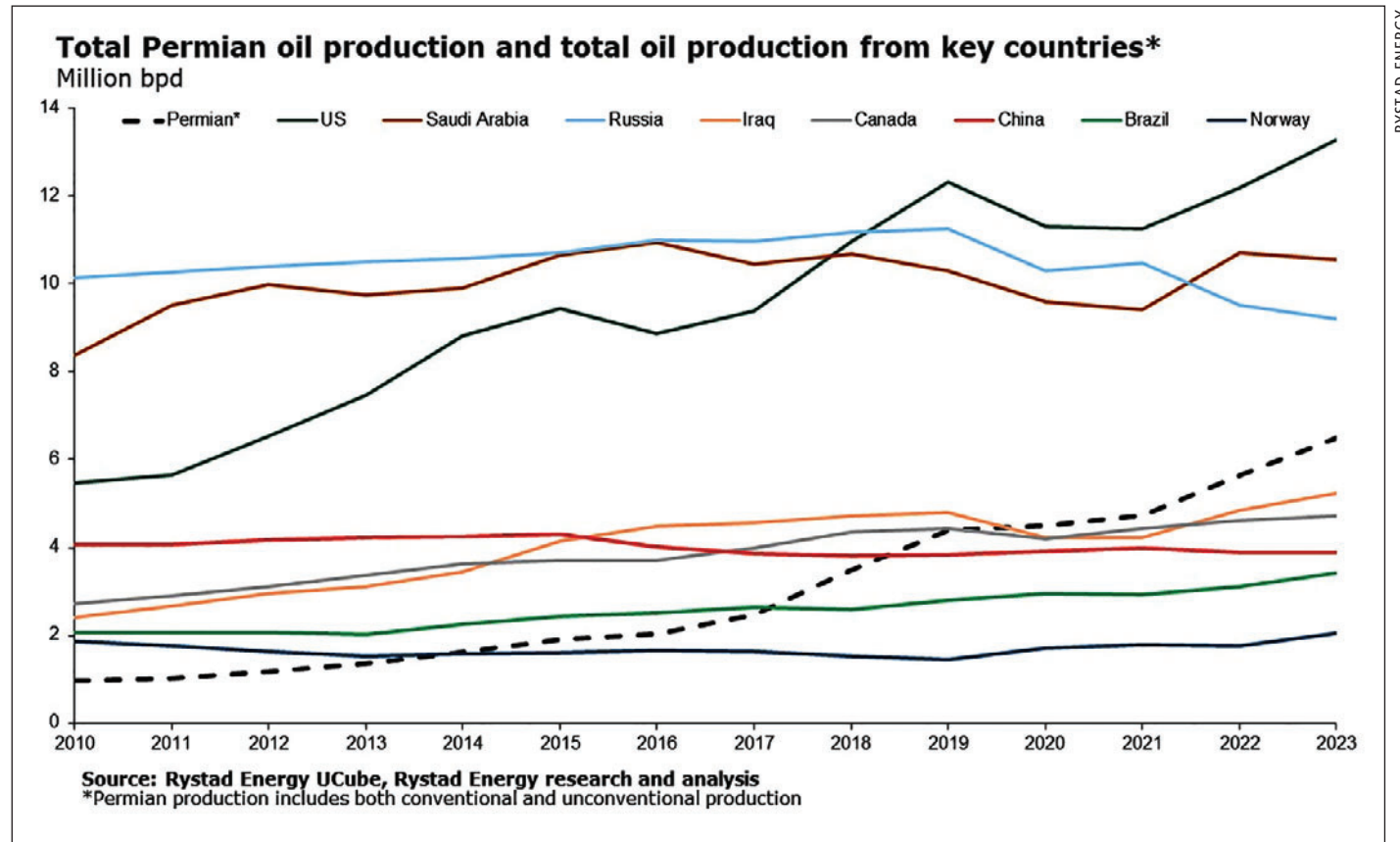
### Shanghai to ease COVID restrictions

On the demand front, a positive note was hit by the city of Shanghai, where most of the city's 25 million residents have been freed from COVID-19 induced restrictions that have hung over the major Chinese industrial center for two months. Residents were able to hit the streets June 1.

Some COVID restrictions remain. Public venues and transportation require a negative COVID test taken within 72 hours.

The draconic COVID response in Shanghai angered residents and garnered criticism of China's zero-COVID policies.

Shanghai authorities ordered media organizations to avoid using the phrase “lifting lockdown,” according to a CNN report.



"The situation in Shanghai is different from that of Wuhan because (we) never announced the 'lockdown,' so there is no 'lifting lockdown' to speak of," the notice said. "Shanghai's whole-area static management is only pressing the pause button, during which the city's core functions were still running."

### Permian to surpass Iraq?

Permian oil production growth is expected to outpace that of Iraq this year and next as surging demand for oil meets historically tight supply, according to Rystad Energy research.

Total conventional and unconventional oil output from the Permian is forecast to grow by 1 million barrels per day in 2022, jumping from 4.7 million bpd to 5.6 million bpd before climbing to 6.5 million bpd in 2023, Rystad said in a May 31 release. Iraq's output will grow by some 600,000 bpd in 2022 and 400,000 in 2023. (See chart in pdf version of story.)

In 2010, the Permian produced just 1 million bpd, dwarfed by oil-producing countries such as Norway, Brazil, and

Canada, Rystad said. Total U.S. production was below 6 million bpd in 2010.

In years since, output surged with the Permian becoming a critical driver of U.S. production growth, the consultancy said, adding that the basin now boasts higher production than any country besides Russia and Saudi Arabia.

In 2023, the Permian is on track to account for half of U.S. oil output of 13.2 million bpd, up from 42% in 2021, Rystad said. The Permian has produced more oil per year than Iraq since 2020, and the gap between the two countries will widen in the next two years.

Permian oil production will outstrip the combined output of Norway and Brazil in 2022, which will together produce about 4.8 million bpd.

"The Permian has become the hot spot for US oil production thanks to significant resources, low breakeven costs, and high oil content," said Espen Erlingsen, Rystad head of upstream research. "This trend is only likely to continue as global oil markets struggle with supply constraints and the demand for oil shows little sign of easing."

Increased output is expected across all US shale basins, with growth from key plays estimated to be more than 1 million bpd — the highest level seen since 2019.

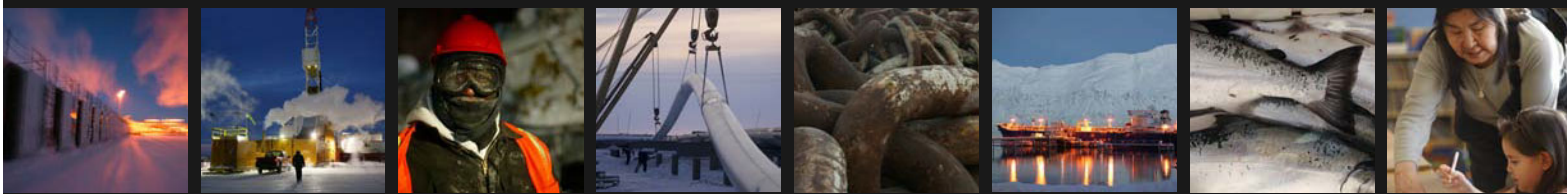
Permian Delaware production is expected to rise by 500,000 bpd, while the Permian Midland will see a 450,000-bpd increase, Rystad said. The Bakken, Eagle Ford and DJ Basin are expected to post modest growth.

In 2023, total oil production for these five plays may approach 9 million bpd, closing in on Saudi Arabia's total oil production of around 9.5 million bpd in 2021, Rystad said.

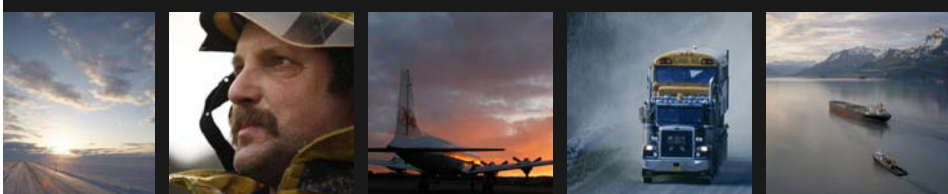
Since 2016, total investments in the Permian Midland have jumped from \$10.3 billion to an anticipated \$23.5 billion this year, while Permian Delaware investments rose from \$7.7 billion in 2016 to a forecast \$25 billion this year, Rystad said. Investments in other key tight oil plays have remained relatively flat and have failed to recover since pandemic-caused CAPEX reductions. ●

Contact Steve Sutherland  
at [ssutherland@petroleumnews.com](mailto:ssutherland@petroleumnews.com)

# WHATEVER



# WHENEVER



# WHEREVER

Creative photography for the oil & gas industry.  
[judypatrickphotography.com](http://judypatrickphotography.com)  
907.258.4704

**JUDY PATRICK**  
PHOTOGRAPHY