Petroleum news

page 4 EIA expects lower crude prices in '23, '24, higher consumption, production

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Governor chooses Huber for AOGCC public seat, names him chair

BRETT HUBER

Alaska Gov. Mike Dunleavy has named Brett Huber Sr. as chair of the Alaska Oil and Gas Conservation Commission, effective Jan. 9. Huber will hold the public seat. The most recent chair, Jeremy Price, who also held the public seat, left the commission in September to join HF Sinclair as government and public affairs manager.

In a Jan. 9 press release the governor's office said Huber has nearly 30 years of public policy and oil and gas industry experience.

"With Mr. Huber's vast knowledge and background in resource development in Alaska, I am proud to appoint him to this role," Dunleavy said. "I look forward to watching his efforts to protect public interest and do what's best for Alaska and her people."

The governor's office said Huber first moved to Alaska from Colorado in 1984 and during his early career designed and installed geomembranes for North Slope and Kenai Peninsula oil and gas operations. Huber worked for the Alaska Legislature

see HUBER APPOINTMENT page 8

Hilcorp applies to drill 2 wells on Ninilchik Paxton Pad extension

Hilcorp Alaska has applied to the Alaska Division of Oil and Gas for a unit plan of operations amendment to drill two grassroots wells on the Paxton Pad in the Ninilchik unit on the Kenai Peninsula. The division said the pad is some 4 miles northeast of Ninilchik near milepost 131 of the Sterling Highway.

Ninilchik is one of the largest natural gas fields in Cook Inlet. In November, the most recent month for which production data is available from the Alaska Oil and Gas Conservation Commission, Ninilchik accounted for 17% of Cook Inlet gas production; the Paxton Pad accounted for 43% of Ninilchik production.

The company won approval from the division in August to expand the Paxton Pad to provide space for a drilling rig to drill new wells. The new wells were not included in the pad expansion application and approval.

In a public notice on the current application the division

see PAXTON PAD page 8

2022 TAPS throughput up from '21; 483,416 bpd 1st increase since '17

The volume of oil moved through the Trans Alaska Pipeline System, TAPS, in 2022 was an increase over 2021, the first year-over-year increase since 2017, TAPS operator Alyeska Pipeline Service Co. said Jan. 10.

For 2022 the total volume was 176,446,377 barrels, an average of 483,415 barrels per day, up nearly 6,000 bpd from 2021, when daily throughput averaged 477,798 bpd — a total for that year of 174,396,146 barrels.

Alyeska said the 2022 total was also higher than 2020, when the daily average was 480,199 bpd and the total 175,752,654 barrels.

Alyeska records show throughput peaked in 1988 at 744,051,738 barrels, an average of 2,032,928 bpd.

2022 was the 45th year of operation, Alyeska said.

The company called the throughput increase positive for TAPS, the TAPS owners and that state. "It also reflects the innovative work of Alyeska staff and TAPS contractors in the

see TAPS THROUGHPUT page 8

FINANCE & ECONOMY

Glacier Oil sold

Pontem and SEP team up to drive new Alaska oil and gas production

By KAY CASHMAN

Petroleum News

On Jan. 9, Glacier Oil & Gas, an independent oil and gas company focused on the exploration and production of Alaska resources from the North Slope to the Cook Inlet, announced that Pontem Energy and Sweat Equity Partners, or SEP, acquired 100% ownership in Glacier.

STEPHEN RATCLIFF

Glacier owns and operates upstream and midstream assets in Alaska that produce approximately 2,500 barrels of oil per day in the North Slope at the Badami unit, in the Cook Inlet basin at 1) the West McArthur River unit and 2) off the Osprey Platform at the Redoubt unit.

Originally built at costs that exceeded $500 million, Glacier's assets have produced more than 31 million barrels of oil over the past 25 years. Using recent third-party estimates, Glacier's fields contain more than 9 million barrels of remaining proven reserves.

"We are excited by the opportunities that lie ahead for Glacier, its employees, and its new financial backers, Pontem and SEP," Glacier President Stephen Ratcliff said.

see GLACIER SALE page 10

FINANCE & ECONOMY

$80 ANS crude redux

Bullish economic recovery sentiment overshadows massive reserves build

By STEVE SUTHERLIN

Petroleum News

Alaska North Slope crude regained the $80s, vaulting $2.82 Jan. 11 to close at $80.15 per barrel, while West Texas Intermediate leapt $2.29 to close at $77.41 and Brent leapt $2.57 to close at $82.67.

New optimism for economic recovery — particularly in China — and potential loss of Russian supply overcame the third largest U.S. commercial crude inventory build of all time, as reported by the U.S. Energy Information Administration Jan. 11.

U.S. inventories for the week ending Jan. 6 jumped by 19 million barrels from the previous

Energy security worldwide has suffered from a wave of underinvestment that has overtaken the world's oil and gas sector, abetted by the implications that have sprung from the Russian military incursion into neighboring Ukraine.

week to 439.6 million barrels, 1% above the five-year average for the time of year.

The Department of Energy released just 0.8 million barrels from the Strategic Petroleum Reserve, leaving it with just 371.6 million barrels, the least since December 1983.

see OIL PRICES page 9

GOVERNMENT

Confidentiality at issue

AOGCC to release Willow data; Conoco sues, citing federal statutes for NPR-A

By ALAN BAILEY

For Petroleum News

There is a continuing case in federal District Court in Alaska, in which ConocoPhillips is challenging the Alaska Oil and Gas Conservation Commission's intent to release to the public the data for wells that the oil company drilled in conjunction with its major Willow oil discovery in the National Petroleum Reserve-Alaska.

The NPR-A consists of federal land subject to federal jurisdiction under a number of federal statutes, including the National Petroleum Reserve Protection Act. Under a 1980 modification to the NPRPA, an Information Program requires lessees and permittees for oil and gas exploration and

Much of the debate in the court case revolves around the question of whether the federal law governing NPR-A preempts state law that governs AOGCC's authority.

development in the NPR-A to provide well information to the Secretary of the Interior, with confidentiality of the information then being maintained for the duration of the relevant oil and gas leases.

However, AOGCC also has regulatory authority over oil and gas drilling in Alaska and issues permits for the drilling. That authority extends over

see WILLOW DATA page 7

● FINANCE & ECONOMY

2023 oil and gas employment forecast

Alaska expected to gain 5,300 jobs; slower gains in oil and gas, which picked up 300 jobs in 2022, expected to gain 400 this year

By KRISTEN NELSON

Petroleum News

Oil and gas employment in Alaska in 2023 is expected to edge up slightly to 7,400, a gain of 400 jobs, 5.7%, from a 2022 average of 7,000 jobs, but still down 25.3% from a 2019 average of 9,900 jobs, the Alaska Department of Labor and Workforce Development said in January's Alaska Economic Trends.

In a statewide jobs forecast, economist Karinne Wiebold said the state gain in jobs for 2023 is forecast at 5,300, up 1.7% from 2022. Data for estimated total nonfarm employment included in the article show an estimate of 323,800 jobs this year, up 2.7%, 8,300, from a monthly average of 318,500 in 2022, but down 1.9% from 330,000 jobs in 2019.

State employment shrank sharply in 2020 due to the COVID-19 pandemic.

"The easiest gains appear to be behind us," Wiebold said. "In 2021, rebounds from pandemic lows came from reopenings and massive infusions of federal money through household stimulus checks, enhanced unemployment benefits, and direct support to businesses and state and local governments."

The state continued to add jobs in 2022 as schools reopened, cruise ships returned, there was more travel and restaurant visits, and oil prices climbed.

"This year's gains will likely come in smaller amounts from a wider range of industries, as we expect all Alaska industries to grow or hold steady," Wiebold said, with growth curtailed by some remaining pandemic concerns.

Oil and gas

The oil and gas industry was hard hit during COVID, Wiebold said, down 2,300 jobs in 2020, nearly a quarter, after the industry had just begun to gain ground in 2019 following the three-year state recession (2015-18) driven by falling oil prices.

The industry continued to lose jobs in 2021, down 900.

"Oil prices have been volatile, falling into negative territory briefly in April 2020 and soaring to nearly $130 a barrel after Russia invaded Ukraine in spring 2022," Wiebold said. "The invasion put pressure on the international market to avoid buying from Russia, the largest crude oil producer after the United States."

There was only modest job growth in 2022 as oil prices rose, with the industry still some 2,900 jobs below 2019 and at about half its 2014 employment peak.

"Activity on the North Slope has increased, though, and that combined with preparation for the Pikka and Willow projects will boost employment by about 400 this year," Wiebold said.

Industry in Anchorage

In a discussion of the Anchorage jobs forecast in the January issue of Trends, economist Neal Fried said there are no major changes on the horizon for Anchorage in 2023, but the fiscal picture has improved on high oil prices which "could fuel more activity in the oil and gas sector."

While most oilfield activity is on the North Slope, he said, "Anchorage is the industry headquarters, and subcontractors such as security firms and caterers are based there. Anchorage residents also commute to work in the oilfields."

Employment in Alaska's oil and gas industry hit a 16-year low in 2021 and "has barely budged since," but "two years of high oil prices will spur growth in 2023," Fried said, citing projects on the drawing board such as Willow, "continued work on Fiord West Kuparuk, additional drilling at Alpine, and phase one of the Pikka development."

Data accompanying the article shows oil and gas jobs in Anchorage averaging 1,600 per month in 2021, dropping to 1,500 in 2022, down 6.3%, and forecast to rise to 1,700 in 2023, up 11.8%. Prior to COVID, Anchorage oil and gas jobs averaged 2,500 in 2019, and the 1,700 forecast for 2023 would be a drop of 32% from pre-pandemic job numbers.

Total Anchorage nonfarm employment was 142,500 in 2021, rose to 145,100 in 2022, up 1.8%, and is forecast to be 147,500 in 2023, up 1.6%, down 2.5% compared to a 2019 pre-pandemic number of 151,300.●

Contact Kristen Nelson at knelson@petroleumnews.com

contents

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● EXPLORATION & PRODUCTION

US rotary rig count down by 7 to 772

By KRISTEN NELSON

Petroleum News

The Baker Hughes' U.S. rotary drilling rig count was 772 on Jan. 6, down by seven from the previous week — the largest drop since Sept. 3, 2021, when the count dropped by 11 — and up 184 from 588 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 Jan. 6 count includes 618 rigs targeting oil, down by three from the previous week and up 138 from 481 a year ago, with 152 rigs targeting natural gas, down by four from the previous week and up 45 from 107 a year ago, and two miscellaneous rigs, unchanged from the previous week and up by two from a year ago.

Forty-six of the rigs reported Jan. 6 were drilling directional wells, 700 were drilling horizontal wells and 26 were drilling vertical wells.

Alaska rig count unchanged

The Texas rig count (378) was up by two from the previous week.

Ohio (14) was up by one rig.

Oklahoma (66) was down three rigs week over week.

California (4), Louisiana (66) and New Mexico (100) were each down by two rigs.

Pennsylvania (21) was down by a single rig.

Rig counts in other states were unchanged from the previous week: Alaska (9), Colorado (21), North Dakota (39), Utah (12), West Virginia (17) and Wyoming (20).

Baker Hughes shows Alaska with nine rotary rigs active Jan. 6, unchanged from the previous week and up by four from a year ago, when the state's rig count stood at five. All nine of the Alaska rigs were onshore, unchanged from the previous week. There were no offshore rigs active in the state.

The rig count in the Permian, the most active basin in the country, was unchanged from the previous week at 353 and up by 61 from 292 a year ago.

International rig count down one to 910

Baker Hughes' international rig count for December, issued Jan. 6, is down by 10 rigs from November at 900 rigs, with land rigs down by four to 684 and offshore rigs down by six at 216. The December international count is up by 66 rigs from the comparable count in 2021, 834, with land rigs up by 36 and offshore rigs up by 30.

Baker Hughes began providing a monthly international rig count in 1975. The international count excludes North America which is included in the company's worldwide figures.

The Middle East accounts for the most rigs in the international totals, 323 in December, followed by Asia Pacific with 197, Latin America with 173, Europe with 115 and Africa with 92.

The U.S. rig count averaged 779 in December, unchanged from November, and up by 200 from December 2021, while the Canadian count for December averaged 155, down 46 from a November average of 201 and up by five from December 2021.

Worldwide the rig count was 1,834 in December, down 56 from 1,890 in November and up by 271 from 1,563 last December. ●

Contact Kristen Nelson at knelson@petroleumnews.com

EXPLORATION & PRODUCTION

Eastern coastal area open to tundra travel

The eastern coastal area on the North Slope opened for winter off-road tundra travel Jan. 4.

The Alaska Department of Natural Resources' Division of Mining, Land and Water said it documented soil temperatures of minus 5 degrees Celsius at depths of 30 centimeters and more than 6 inches of snow on state lands in the eastern coastal area.

The opening for the 2022-23 winter season applies to operators with valid off-road vehicle travel permits to operate on state-owned lands on the North Slope. The division said that while overall snow cover is good it may be thin in some areas and those should be avoided or special construction methods used to protect the tundra. State personnel may conduct inspections to ensure compliance.

The western coastal area opened Dec. 16.

The division said the lower and upper foothills areas remain closed.

In the lower foothills area, average snow depths have decreased slightly, "primarily due to wind transport," although the wind slab has strengthened. Two stations have reached the snow depth requirement of 9 inches, but soil temperatures remain variable "and stations with more snow have warmer soil temperatures." The required minus 5 degrees C at 30 centimeters has been reached at three stations.

In the upper foothills, snow depth has increased modestly at two monitoring stations and two others have met the 9-inch requirement. Soil temperatures are decreasing steadily at two stations with the highest snow depths, the division said, and two stations have met the minus 5 degrees C requirement at 30 centimeters.

The division said staff will return to the North Slope at the end of January to continue monitoring.

—PETROLEUM NEWS

UTILITIES

GVEA upgrading Healy 1 coal fired plant

Golden Valley Electric Association, the electricity utility for the Fairbanks region, has notified the Regulatory Commission of Alaska that it is moving ahead with the installation of a selective catalytic reduction system in its Healy 1 coal fired power plant. The objective is to reduce emissions from the plant, to meet Environmental Protection Agency regulations. GVEA has said that Healy 1 is one of the utility's most reliable and low-cost generation systems.

> *The objective is to reduce emissions from the plant, to meet Environmental Protection Agency regulations. GVEA has said that Healy 1 is one of the utility's most reliable and low-cost generation systems.*

As previously reported by Petroleum News, the Healy 1 upgrade comes as part of a broader strategic plan for meeting GVEA's power generation needs in the coming years. The other components of the strategy consist of the retirement of the Healy 2 coal fired power plant; a request for proposals for a large-scale wind power facility; the installation of a new battery energy storage system; and the securing of a power purchase agreement for 30 to 50 megawatts of natural gas fueled power generation.

GVEA now says that it has entered into an engineering, procurement and construction contract with a vendor for the Healy 1 catalytic reduction system. The objective is to complete the project in the third quarter of 2024, ahead of the Dec. 31, 2024, deadline that was set by the EPA.

Meanwhile, GVEA is also moving forward with the other components of its strategic plan for future power generation, GVEA told RCA.

—ALAN BAILEY

● FINANCE & ECONOMY

EIA expects lower crude prices in ’23, ’24

Global fuel consumption expected to hit record 102 million barrels in ’24; crude production expected to increase in next two years

By KRISTEN NELSON
Petroleum News

The Brent crude oil spot price, which averaged $100.94 per barrel in 2022, is expected to average $83.10 this year and $77.37 in 2024, the U.S. Energy Information Administration said Jan. 10 in its January Short-Term Energy Outlook. That 2024 Brent price would be more than 20% lower than 2022.

Meanwhile, global consumption of liquid fuels, including gasoline, diesel and jet fuel, is forecast to reach record highs in 2024, exceeding 100 million barrels per day this year, for the first time since 2019, and averaging more than 102 million bpd in 2024, the agency said.

Crude oil prices are expected to decline, even as consumption increases, because crude production in the U.S. and other countries is expected to continue to increase.

“Our forecast for global consumption of petroleum depends on uncertain economic conditions — especially in China,” EIA Administrator Joe DeCarolis said. “How China’s economy changes following its reopening from pandemic lockdowns could have a significant impact on global consumption of petroleum products.”

Uncertainties

In discussing its forecast that oil prices will fall in 2023 and 2024, EIA said there are three factors which could “meaningfully affect our oil price outlook.”

JOE DECAROLIS

Crude oil prices have generally been in decline “since March 2022, when Russia’s full-scale invasion of Ukraine sent the price of Brent crude oil above $130/b,” the agency said. Oil inventories were already low when the invasion occurred and the possibility of sanctions or physical disruptions in Russia’s production led to the higher prices. Since March 2022, crude oil prices have fallen “mainly because of slowing growth in both global economic activity and consumption,” EIA said.

The forecast reflects expectations that oil production will outpace consumption, leading to builds in oil inventories. “In general, oil prices tend to increase when oil inventories fall and decrease when inventories grow.”

EIA said while it expects prices to fall, three key factors “ultimately present the possibility for higher prices.”

Russia

The first is Russia, which produced about 11% of global oil in 2022 “and its ability to supply global petroleum markets is one of the largest sources of uncertainty in our forecast,” EIA said.

The EU ban on seaborne imports of petroleum products from Russia, set to take effect Feb. 5, “could be more disruptive than the EU ban on seaborne imports of crude oil from Russia implemented in December 2022.”

EIA said it assumes Russia will reroute some of its petroleum exports but said it does not expect Russia will find new destinations for all of that product because of limited clean tanker availability, causing Russia to reduce crude oil inputs to refineries. “However, Russia’s ability to reroute the petroleum product exports depends on other countries’ willingness to buy Russia’s petroleum and the flexibility of global petroleum product supply chains,” the agency said.

Other sources of growth

EIA said U.S. oil production is the largest source of production growth in its forecast, “but that growth remains uncertain because of relatively low capital investment from oil producers.” Increases in drilling productivity and associated natural gas takeaway capacity in the Permian are expected to result in record annual U.S. crude oil production in 2023 and 2024, from an average 11.86 million barrels per day in 2022 to 12.41 million bpd in 2023 and 12.81 million bpd in 2024.

The Organization of the Petroleum Exporting Countries is the second largest producer after the U.S., accounting for 34% of petroleum liquids in 2022, EIA said, but OPEC production cuts “would tighten balances and result in higher oil prices than we forecast.”

Production from Canada, Brazil and Norway collectively is projected to grown 12% from 2022 to 2024, with growth also expected from new sources in Guyana, but delays in project start times would lower its production estimates, EIA said.

Reopening of China

China accounted for 15% of world petroleum consumption in 2022, EIA said, and changes there could have large effects, with the pace and magnitude of that country’s efforts to reopen after the reduction of its COVID-19 restrictions presenting “another considerable uncertainty for global oil markets.”

China’s consumption could be less than forecast “if rising COVID-19 cases cause significant disruptions to economic activity and travel, particularly in early 2023.” And consumption there could be more than forecast “if the end to COVID-related restrictions ultimately results in higher and more sustained economic growth,” EIA said.

Natural gas

The price for natural gas at Henry Hub averaged $6.42 per million British thermal units in 2022 and is forecast to average $4.90 per million Btu in 2023 and $4.80 in 2024. EIA said the expectation for the price decline is based on continued growth in domestic production, with growth in U.S. liquefied natural gas exports also expected to remain string with more LNG export facilities coming online.

“The natural gas market is particularly uncertain,” DeCarolis said, “but we expect that U.S. natural gas production

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● EXPLORATION & PRODUCTION

Methane hydrate test program progresses

DOG OKs construction of temporary ice pad to extend Prudhoe Bay gravel pad to support drilling project; new drilling is underway

By ALAN BAILEY
For Petroleum News

Alaska's Division of Oil and Gas has approved a change to the plan of operations for methane hydrate production testing on the North Slope. The change involves the construction of an ice pad to temporarily expand the area of the Prudhoe Bay Unit 7-11-12 gravel pad that is being used for the testing. ASRC Consulting and Environmental Services had told the division that the ice pad would be a staging area for modules being used in the project — the modules will be placed on and removed from the pad using a crane, thus eliminating any need for tractor or trailer equipment on the ice.

Meanwhile, according to data from the Alaska Oil and Gas Conservation Commission, one of three new wells planned for the project was completed in November.

The project has an objective of testing the practicality of sustained natural gas production from subsurface methane hydrate deposits.

International team

ASRC Energy Services is the project operator as part of an international team, in which the U.S. Department of Energy is partnering with the U.S. Geological Survey; Japan's Ministry of Economy, Trade and Industry; and the Japan Oil, Gas and Metals National Corp. The testing is being conducted through an agreement between ASRC Energy Services and Hilcorp Alaska, the Prudhoe Bay unit operator.

The project has an objective of testing the practicality of sustained natural gas production from subsurface methane hydrate deposits. Methane hydrate is a solid in which molecules of methane, the primary component of natural gas, are concentrated inside a lattice of water molecules. Vast quantities of the material are known to exist around the base of the permafrost under the North Slope.

The North Slope, being an onshore region with a substantial oil and gas infrastructure, is considered an excellent location for testing the production of gas from methane hydrate. Although short-term production has previously been demonstrated, the feasibility of sustained, long-term production has yet to be determined. Nor are the economics of potential commercial production fully understood.

Planned wells

The research team completed an initial test well from the Prudhoe Bay pad in January 2019. The well penetrated two highly saturated hydrate-bearing reservoirs. A plan to drill additional wells was delayed, presumably because of the COVID pandemic. The U.S. Department of Energy has said that the plan is now to drill two further production test wells and a geo-data well. The geo-data well will be used to collect subsurface sediment samples before being converted into a monitoring well. The well drilled in 2019 will also be used for collecting data associated with the test program.

It is not clear from available data which of the new wells was completed in November.

DOE has said that the objective of the testing is to determine the response to production of a hydrate reservoir over a long enough time period to effectively evaluate how gas hydrates release gas in response to reservoir depressurization. ●

Contact Alan Bailey at abailey@petroleumnews.com

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EIA OUTLOOK

will establish new record highs in both 2023 and 2024, leading to lower domestic prices."

U.S. LNG exports averaged 10.7 billion cubic feet per day in 2023 and are forecast to average 12.1 bcf per day in 2023 and 12.6 bcf in 2024.

EIA said its 2023 Henry Hub spot price forecast is almost 25% lower than last year, is based on a decline in domestic consumption and relatively flat LNG exports. The 2024 forecast is based on dry natural gas production outpacing an increase in LNG exports resulting from rising LNG export capacity.

Natural gas production is projected to grow in both the Permian and Haynesville regions with completion in 2023 and 2024 of pipeline infrastructure expansions. ●

Contact Kristen Nelson at knelson@petroleumnews.com

THIS MONTH IN HISTORY

Law review article: Unlocking ANWR

Twenty years ago this month: BP-discovered Sourdough field near refuge key to opening coastal plain, whether feds go for royalties

Editor's note: This story is from the Jan. 12, 2003, issue of Petroleum News Alaska.

By KRISTEN NELSON
Petroleum News

What is the impact of proposed development at Sourdough, just west of the Arctic National Wildlife Refuge, on the congressional prohibition on oil production from the coastal plain of the refuge?

20 YEARS AGO THIS MONTH

In a December 2002 article in the Duke University School of Law's Alaska Law Review, "The Arctic National Wildlife Refuge, Correlative Rights, and Sourdough: Not Just for Bread Anymore," Robert Corbisier asks how, absent of drilling in ANWR, can the federal government protect its royalty rights when production begins from the adjacent Sourdough field at the end of the decade?

Corbisier, formerly a staff assistant and legislative aide to U.S. Senator Frank Murkowski, graduates this year from Vermont Law School. He concludes that, in the absence of a vote by Congress to open ANWR, there are four possibilities to resolve the drainage issue: leasing by the secretary of the Interior; action by Alaska against the United States to force unitization; a suit by the state against the federal government to avoid future liability for royalties; and action by the federal government to receive royalties.

Issue not academic

The impact of ANWR production restrictions on Sourdough is not academic: Sourdough, where a discovery was announced by BP Exploration (Alaska) Inc. in 1997, is part of the Point Thomson unit and as a condition of recent expansion of the unit the state of Alaska is requiring development of the Sourdough prospect by 2010.

Unit operator ExxonMobil has presented initial plans for development and the Environmental Protection Agency as lead agency is preparing an environmental impact statement. ExxonMobil's Alaska manager, Jack Williams, said in November that if the EIS process and state permitting are completed on schedule, "then the Point Thomson owners will be in a position to make a decision to proceed with development during the first quarter of 2004." Thomson sands production, he said, would start in early 2007.

The state's agreement with the Point Thomson owners also includes production at Sourdough and another prospect, Lynx, by June 15, 2010.

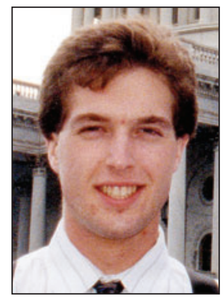
The drainage issue

Corbisier asks how the federal government can determine if drainage is occurring from acreage closed to leasing, and once the determination is made, what steps can state and federal governments take to protect their respective rights?

As owners of adjacent land, state and federal governments have correlative rights, Corbisier said, including rights against waste, against spoilage, against malicious depletion and the rights to a fair opportunity to extract and to conduct operations to enhance recovery (such as water flood).

The 1980 Alaska National Interest Lands Conservation Act prohibits production in ANWR and says that there will be no leasing or other development from the refuge until authorized by Congress.

Corbisier asks: "Does the Act's ban on oil production apply to oil drainage from ANWR to adjacent state-owned land? Does … the Act trump Alaska's sovereign right to develop its land when there is drainage? Does Alaska have any remedy that would allow legal production from ANWR? Does the federal government have any method that would allow it to prove drainage and claim royalties from state-produced oil or gas?"


ROBERT CORBISIER

Congress prohibited not only production but "leasing or other development leading to production of oil and gas" from ANWR, so does that prohibit Alaska from developing land which may drain ANWR? Corbisier asks.

He concludes that since Congress did not designate all of ANWR as wilderness but provided for opportunities for economic and social needs of the state with a focus on preserving the natural values of the surface, that drainage is not prohibited because it does not conflict with the ban on surface development.

Rule of capture

The courts have ruled that oil and gas are subject to the rule of capture: a landowner can drill on his property and has a right to what he produces, even though it may be drained from the adjacent property.

"The owner of the drained land has no legal remedy, but may protect his rights by drilling a well of his own in order to capture the same resource," Corbisier said, subject to "regulations such as well-spacing and boundary setbacks…"

He said courts have ruled subsurface trespass illegal: A well bore cannot reach into adjacent property, including: "the more modern technologies of directional drilling, extended reach wells, horizontal drilling and designer wells when they cross into another person's land."

Corbisier concludes that oil beneath state land can be legally developed, "and, under the common law rule of capture, any oil that might migrate from federal land would belong to producers on state leases." The state would receive all of the royalties, including those "from oil that may have originated in ANWR."

Preventing waste by unitizing

Alaska could also force unitization.

Both the federal government and the state have legislation to prevent waste of oil and gas resources and require unitization of oil and gas fields. With unitization, Corbisier said, the rule of capture no longer operates because lease owners share in the costs and production of the entire resource, and are able to enhance production through practices such as water flood.

Alaska's statute allows forced unitization if parties cannot reach agreement on their own, he said. There is also a reverse twist on the prohibition against waste.

"Theoretically," Corbisier said, "this policy against waste could be superceded by either state or federal law explicitly sanctioning waste. If oil reserves are proven to exist in the 1002 area, a law sanctioning waste may be necessary to designate the area as wilderness."

Executive authority to lease

The federal Mineral Leasing Act of 1920 allows the Secretary of the Interior to issue leases when federal lands are being drained by adjacent leasing, Corbisier said, but that leasing provision does not apply to lands withdrawn for specific purposes, such as ANWR. He notes that one court has held states have a sovereign right to drain from closed federal lands. "If so, then it would follow that the federal government has a corresponding obligation to lease its lands for mineral development if it suspects that its resources are being drained."

Even if this doesn't apply to ANWR, the state "could force the federal government into a lease sale pursuant to its authority to force unitization," Corbisier said.

Proving drainage

If production begins from state lands adjacent to ANWR, could the federal government prove drainage?

At least one case uses a regulatory definition of proved reserves, but that is "in the context of contract law as opposed to determining the existence of a reservoir," Corbisier said. Within the regulatory context, he said, "an expert must show that oil exists on the state land, and that based on the geology, that same pool of oil is economically productive on the ANWR side. If the data is sufficient the analysis ends."

But, Corbisier said, it depends on the definition of proved reserves that the court uses: A widely accepted definition from the American Gas Association requires a consideration of "existing operation conditions, which preclude development in ANWR." I.e. with development precluded, there are no proved reserves.

If existing data cannot be used to prove reserves in ANWR, and hence drainage onto Alaska lands, "the federal government will need to use a well to establish that drainable reserves exist in ANWR," Corbisier said.

And in that case, if there is no drilling, the federal government may allow royalties from ANWR to slip away to the state.

Alaska, Corbisier said, "cannot afford not to proceed with Sourdough's development if it hopes to open the door to exploring ANWR's coastal plain. Sourdough is the key to this door."

Even if the federal government allows its royalties to slip away: "If Sourdough is developed, Alaska wins." ●

● EXPLORATION & PRODUCTION

AOGCC approves Conoco's Coyote EOR

Interval is in Kuparuk River unit and a lease adjacent to the unit on the west; enhanced oil recovery pilot approved for 3 years

By KRISTEN NELSON
Petroleum News

The Alaska Oil and Gas Conservation Commission has approved an application from ConocoPhillips Alaska for a three-year enhanced oil recovery pilot at the Coyote reservoir on the western edge of the Kuparuk River unit.

The project will be both within the Kuparuk River unit and in an adjacent area, non-unitized lease ADL 392374, AOGCC said in a Jan. 4 approval of the request.

The pilot EOR will occur at the Kuparuk River unit 3S Pad drill site.

The commission said the Nanushuk formation was first discovered near the proposed pilot project area in 1965-66 in Sinclair's Colville 1 well, some 3 miles south-southwest of 3S Pad.

Phillips Alaska's Palm 1 exploration well, drilled in 2001 from what is now 3S Pad, encountered oil shows in Nanushuk sandstone. The commission said seven development and service wells drilled to deeper reservoirs have penetrated the Coyote interval in or near the planned project area.

Exploratory, redrilled well 3S-24B, drilled in 2021, penetrated and tested the Coyote interval, AOGCC said.

A formal pool has not been established and for the purposes of this order, the commission said, ConocoPhillips defines affected sediments of the Nanushuk, informally named Coyote sands, as correlating with the reference Palm 1 between 4,270 and 5,115 feet measured depth.

Coyote oil

The commission said Coyote is primarily a stratigraphic trap, with oil in the interval averaging about 32 degrees API.

ConocoPhillips has estimated 31 million barrels of oil within the proposed pilot area, with primary recovery estimated at 5-10%, waterflood recovery 20-30% and an additional 1-5% from potential injection of enriched gas.

The original scope of the three-year pilot includes a central horizontal producer with one offsetting horizontal injector west of the producer, and, depending upon initial results, a second horizontal injector east of the producer.

The commission said ConocoPhillips plans to fracture stimulate the proposed pilot project wells. Two wells, KRU 3S-03 and KRU 3S-21, are within a quarter mile radius of the pilot and are currently open to the Coyote interval. ConocoPhillips will isolate he Coyote interval in KRU 3S-21 with cement prior to fracture stimulation of the proposed pilot wells and will monitor the more distant KRU 3S-03 for pressure changes during Coyote fracture stimulation.

The commission said planned injection fluids include produced water from Kuparuk River oil pools, Beaufort seawater from the Kuparuk seawater treatment plant, hydraulic fracture fluids, tracer survey fluids, wellbore injectivity improvement fluids, freeze protection fluids and standard oil field chemicals such as corrosion and scale inhibitors. The company also proposes potential injection of produced gas from Kuparuk River oil pools and enriched hydrocarbon gas — informally termed miscible injectant.

Commission's conclusions

AOGCC said waterflood injection into Coyote "should substantially improve oil recovery, but the technical and economic feasibility of conducting such an operation has not been demonstrated."

"Uncertainties including rock-strength estimates, unproven reservoir and confinement performance, and potential pressure effects on nearby wells that are currently open to the Coyote interval preclude injection of produced or enriched gas at this time," the commission said.

It approved a three-year pilot and is requiring annual progress reports. ●

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WILLOW DATA

all Alaska lands, including federal land in the NPR-A.

AOGCC requires well data

Under AOGCC statutes and regulations, oil and gas operators must provide well data to the commission. The commission maintains confidentially of the information for two years, after which it normally releases the data to the public. However, if a well operator provides appropriate reasons for keeping the data confidential for more than two years, the commission can, at its discretion, maintain the confidentiality. Normally, confidentiality will be maintained if release of the data would be to the business disadvantage of the operator, who has presumably spent significant money in drilling a well and obtaining the data. This would typically occur in a situation involving a well adjacent to an unleased land tract with exploration potential.

AOGCC's regulation of oil and gas activity in NPR-A supplements federal law rather than conflicting with it, AOGCC argued.

In the case of ConocoPhillips' Willow wells, AOGCC has indicated that it plans to make the well data public, with the two-year timeframe for confidentiality having expired. As per AOGCC regulations, ConocoPhillips had provided the Willow well data to the commission. However, the company asked the commission to maintain data confidentiality pursuant to federal law. The commission did not agree to this request.

Federal preemption?

Much of the debate in the court case revolves around the question of whether the federal law governing NPR-A preempts state law that governs AOGCC's authority. AOGCC obtained the well data directly from ConocoPhillips and not from the Secretary of the Interior. Had AOGCC obtained the data from the Secretary, the commission would have unambiguously been bound by the federal law regarding data confidentiality. But does the confidentiality of the NPR-A well data, under federal law, apply to the state, regardless of how the data were obtained?

"This action seeks a declaration that (AOGCC statutes), as applied, are preempted by federal law where AOGCC seeks to disclose CPAI's information and trade secrets to the public. It seeks to permanently enjoin AOGCC from any future unlawful disclosures," ConocoPhillips told the court.

ConocoPhillips claims that the federal statute pertaining to confidential information contains language that specifically preempts state or local law. The company also argues that the premature disclosure of the well data "impermissibly interferes with the federal government's contracting decisions."

AOGCC has, however, responded by arguing that its rules for handling NPR-A well data do not match any of the three factors that the U.S. Supreme Court has designated would result in federal preemption of state laws. Those factors consist of a pre-emption situation specifically defined under federal law; a situation where state law regulates a circumstance that Congress has designated as to be specifically under the authority of the federal government; and a situation where it is impossible to comply with both federal and state requirements.

Data passed directly to AOGCC

And the pre-emption provisions only apply to well information obtained through federal statutes and regulations — AOGCC obtained the well data directly from ConocoPhillips under state law, and not via the federal government, AOGCC argues. By transmitting its data to AOGCC, ConocoPhillips waived any confidentiality rights over the data, the commission said. Moreover, Congress has never sought exclusive jurisdiction over oil and gas production and conservation that is subject to both federal and state jurisdiction, the commission told the court.

AOGCC's regulation of oil and gas activity in NPR-A supplements federal law rather than conflicting with it, AOGCC argued. If Congress had intended to guarantee the confidentiality of NPR-A oil and gas lessee information, Congress could have expanded the scope of the federal confidentiality provision or could have limited the state's authority in NPR-A, the commission said.

Oral arguments in the case were heard on Nov. 22. ●

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HUBER APPOINTMENT

focusing on oil and gas, land, fish and wildlife issues, the governor's office said, and served as Dunleavy's senior policy advisor and communications director.

"I am humbled and excited to be appointed by Governor Dunleavy to this important role as the Chair," Huber said in the press release. "I look forward to furthering the public interest in exploring and developing Alaska's valuable oil, gas, and geothermal resources while protecting the Alaska we love."

AOGCC is an independent, quasi-judicial agency of the State of Alaska. It oversees oil and gas drilling, development and production, reservoir depletion, and metering operations on all lands subject to the state's police powers.

Per its website, the commission's mission is "to protect the public interest in exploration and development of Alaska's valuable oil, gas, and geothermal resources through the application of conservation practices designed to ensure greater ultimate recovery and the protection of health, safety, fresh ground waters and the rights of all owners to recover their share of the resource."

Huber worked for the Alaska Legislature focusing on oil and gas, land, fish and wildlife issues, the governor's office said, and served as Dunleavy's senior policy advisor and communications director.

—KAY CASHMAN

Contact Kay Cashman at publisher@petroleumnews.com

STATE OF ALASKA

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TAPS THROUGHPUT

face of declining flow, exciting activity on Alaska's North Slope and support for Alaska's oil and gas industry's work."

"The best long-term solution for safe and sustainable TAPS operations is more oil, so this increase is a notable milestone," said Betsy Haines, Alyeska's interim president. "It's also a positive for Alaskans and our state's economy. We are all encouraged by discoveries and development on the North Slope, and supportive of an external environment that fosters responsible resource development, creates future throughput increases for TAPS, and strengthens our state and country."

There have been annual throughput declines since 2017, Alyeska said. The daily average in that year was 527,328 bpd. 2016 had seen the first year-over-year increase since 2002, the last year daily throughput was more than 1 million bpd.

Average throughput was 610,408 bpd in 1977, the year TAPS came online. Throughput then averaged more than 1 million bpd through 1999, dropping below 1 million bpd in 2000 and 2001, before recording the last average of more than 1 million bpd in 2002.

Alyeska said that at the close of 2022, the cumulative total of barrels moved through TAPS was 18,539,689,449.

—PETROLEUM NEWS

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PAXTON PAD

said that in addition to two grassroots wells, the project includes installation of associated infrastructure including gas flowlines, electrical instrumentation, well cellars and conductors.

The division is accepting public comments on the application, which is available on the division's website at http://dog.dnr.alaska.gov/Newsroom, through Feb. 11 at 4:30 p.m. Alaska standard time.

Paxton 12, Paxton 13

Hilcorp said in its application that the proposed start date for the new wells — Paxton 12 and Paxton 13 — is Feb. 25, subject to permit approvals. The company said it will tie the new wells into existing gas production facility infrastructure on the Paxton Pad.

Major components for the work include Hilcorp Rig 169, pipe, the completion rig, mud tanks and mud pumps, boilers, drilling foreman/toolpusher trailer, light plants, generators, cement silo(s) and other miscellaneous equipment which will be onsite temporarily to support drilling efforts.

The company said drilling and well testing work is temporary, with temporary sound impacts during construction and drilling.

"Except where safety concerns dictate otherwise, lights on the drill rig and mobile light plants will be pointed down toward activities occurring on the pad," Hilcorp said. Communication during drilling will be by handheld radios, rather than by loudspeakers, and broadband "white noise" backup alarms will be used instead of single-tone backup alarms, the company said.

There were complaints about noise and light pollution when Hilcorp filed to expand the pad.

Schedule

The proposed schedule is:

•Feb. 25-27, mobilization and preparation for drilling activities.

•Feb. 28-March 28, drilling and testing of Paxton 12.

•March 29-April 15, installation of facility piping, electrical and instrumentation lines to tie Paxton 12 into existing Paxton Pad production infrastructure.

•April 15, beginning of natural gas production from Paxton 12.

•April 16-May 16, drilling and testing of Paxton 13.

•May 17-June 12, installation of facility piping, electrical and instrumentation lines to tie Paxton 13 into existing Paxton Pad production infrastructure.

•June 12, beginning of natural gas production from Paxton 13.

Hilcorp said the project dates are subject to change based on permit authorization, project constraints, scheduling, weather and other factors.

—KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

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OIL PRICES

China announced a substantial increase in its crude import quotas for 2023, indicating that Chinese refiners will increase output as the nation scraps its COVID Zero policy. Quotas have been raised twice, up 20% compared to the same time last year, according to Bloomberg. The import quota for the year now stands at 131.82 million tonnes.

From Wednesday to Wednesday, ANS gained $5.33, rising from $74.82 Jan. 4 to its close Jan. 11 of $80.15.

ANS inched up 5 cents on Jan. 10 to close at $77.33, as WTI rose 49 cents to close at $75.12 and Brent rose 45 cents to close at $80.10.

ANS logged no change Jan. 6 to close at 76.17, and WTI rose 10 cents to close at $73.77, while Brent fell 12 cents to close at $78.57.

ANS popped $1.36 Jan. 5 to close at $76.17, as WTI lifted 83 cents to $73.67 and Brent gained 85 cents to close at $79.69.

Energy crisis: no end in sight

Energy security worldwide has suffered from a wave of underinvestment that has overtaken the world's oil and gas sector, abetted by the implications that have sprung from the Russian military incursion into neighboring Ukraine.

European power markets remain under stress even in the face of improved hydro availability, falling gas prices and added wind and solar capacity circa 2022 and in 2023, Wood Mackenzie Chairman and chief analyst Simon Flowers said in a Jan. 11 note.

"With the French nuclear fleet continuing to underperform, Europe will rely on expensive gas and coal to keep the lights on," Flowers said. "Energy affordability, therefore, is the other political preoccupation, meaning ongoing intervention."

Governments will extend emergency measures from 2022, including refining price caps in wholesale and retail energy markets, and windfall taxes, he said.

A revamping of pricing mechanisms in wholesale power is at the top of the agenda, but over-zealous intervention in gas and power markets creates more problems than it solves, Flowers said.

European power markets remain under stress even in the face of improved hydro availability, falling gas prices and added wind and solar capacity circa 2022 and in 2023, Wood Mackenzie Chairman and chief analyst Simon Flowers said in a Jan. 11 note.

Flowers further warned that a resurgent Chinese economy could steal LNG supply away from Europe next winter, or worse — a big wildcard — if war spreads into Europe, it could disrupt non-Russian gas supplies into the region.

CAPEX continues to recover

On a brighter note, capital spending in upstream oil and gas is extending its recovery, Flowers said.

"We expect an increase of 10% in 2023 to around US$470 billion, well above the cyclical low of US$370 billion in 2020," he said. "However, around half of the increase this year is inflation-related, with supply chains tight in major markets — there is little sign of a true upcycle despite high oil and gas prices."

Moody's Investor Service largely agreed, forecasting a 10% to 15% "sequential uptick" in upstream CAPEX in 2023 and an overall strong year, with service companies likely to see increased demand, Hart Energy reported Dec. 11

"Overall spending though this year will come in lower than the levels seen between 2015 and 2019, Moody's vice president and senior credit officer Sajjad Alam said Jan. 5 in a company report.

"The spectre of windfall taxes adds uncertainty to the cautious mindset of oil and gas companies," Wood Mackenzie's Flowers said. "Out of a healthy pipeline of 60 large potential project FIDs, we think only 30 will proceed in 2023."

Global power and renewables spending — flat at around $500 billion — matches 2022's record and continues to eclipse upstream oil and gas as the biggest segment in the global energy market, Flowers said.

"After a decade of strong growth, spend on renewables will temporarily falter in 2023, checked by cost inflation in a tight supply chain," he said. "Renewables spend now makes up 70% of the total, having doubled over the last decade."

"A wave of FIDs in nascent low-carbon technologies, including hydrogen and CCUS (Carbon capture, utilization and storage) won't deliver much investment this year," he said.

Recovering demand drives prices higher

Prices may be volatile in the early months of 2023 with low growth, or recession in some parts of the world, Flowers said.

"The last 12 months, though, have proved that oil will be central to the energy mix for years yet," he said.

China's recovering economy is key to demand, boosting global oil demand 2.3 million barrels per day this year versus 2022 — 8% higher, he said.

"The pace of demand growth through the year is a better indicator of how the market could be jolted out of the current doldrums," Flowers said. "We forecast an increase of 3.0 million bpd for Q4 2023 compared with Q4 2022, lifting demand to an all-time high of 102.6 million bpd."

The OPEC+ decision to cut production in November 2022 signaled its determination to balance the market but hold prices near $90 per barrel — goals more easily achieved with recovering demand growth, he said.

The EU product ban instated Feb. 5 will add friction and costs to the global refining system at a time of tight diesel supplies globally, Flowers said.

"A big risk is that Russian product exports stall, tightening both product and crude markets, while the flowback of product back into the Russian system causes domestic crude production to fall more than our forecast," he said. ●

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GLACIER SALE

“Over the last couple years, we have remained committed to building Glacier during the pandemic while working diligently on production enhancement operations, plans for drilling additional wells, evaluating capital enhancement options, and better alignment through vested ownership. We are excited that this acquisition aligns our vision of growth through development drilling and increased production, maintains our strong corporate culture and our team, and provides an avenue to develop the Glacier brand as a sustainable and long-term player in … Alaska,” Ratcliff said.

Pontem’s Managing Partner Jeff Bartlett said: “We are thankful for Glacier’s prior owners’ focus on safety, environmental stewardship and for positioning the company to capitalize on its remaining growth opportunities during today’s improved commodity price environment. Such investment will benefit Glacier’s employees, its operating partners and oilfield service providers while generating additional royalty income for the State of Alaska.”

SEP’s President Andrew White stated, “We invest in management teams who build culture to attract and retain the best employees and who understand how to profitably, and sustainably, grow their business. Stephen and his team at Glacier have proven their leadership in safety culture with no lost time accidents in eight years and in operating culture with consistently strong environmental and financial results.”

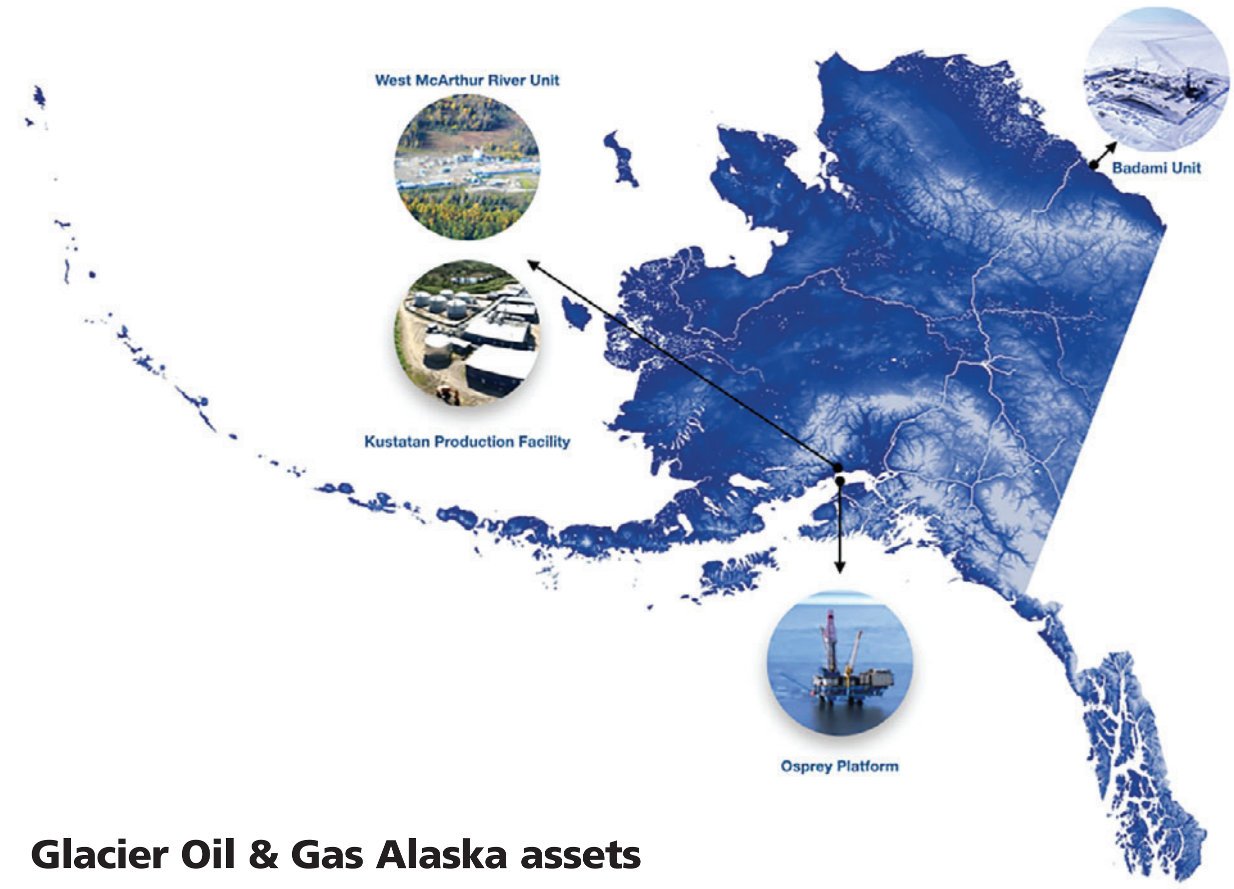
White said Ratcliff’s team has a “clear strategy: to build Glacier into the preeminent Alaskan oil and gas operator, and I look forward to working with them to achieve their goals.”

Bracewell provided legal representation to Glacier during the transaction while King & Spalding provided legal representation to Pontem and SEP.

For more information about Glacier go to: www.GlacierOil.com.

For more information about Pontem, which provides capital solutions for and consulting services to the upstream and midstream energy sectors, go to www.pontemec.com.

For more information about Sweat Equity Partners, which is an entrepreneur-led family of companies in domestic energy, CleanTech, PropTech & SaaS, go to www.SEPLP.com.



GLACIER OIL & GAS

Glacier Oil & Gas Alaska assets

> *“We are excited that this acquisition aligns our vision of growth through development drilling and increased production, maintains our strong corporate culture and our team, and provides an avenue to develop the Glacier brand as a sustainable and long-term player in … Alaska,” Ratcliff said.*

Savant looking to drill

Petroleum News’ annual Producers magazine, released on Nov. 13, reported that Savant Alaska, a Glacier company, was looking to drill in its North Slope Badami unit, but the ability to do so was reliant on finding funding and economic conditions, including the price of oil.

BP Exploration (Alaska) Inc. brought the North Slope oil field, which lies between Prudhoe Bay and the Point Thomson unit, into production in 1998.

The reservoir at Badami was compartmentalized, making it difficult to develop in the usual manner. BP had to frequently suspend operations to let reservoir pressure recharge.

BP developed the unit with a processing facility capable of handling 38,500 barrels per day of oil. But by the mid-2000s, average production was down to 876 barrels per day.

Taking a different approach, BP partnered with the small independent Savant Alaska in 2008 and then sold the field. Savant then became a subsidiary of Glacier.

In its decade overseeing the unit, Savant has stabilized production with two successful development wells: B1-38 and the B1-07 Starfish well. With production averaging around 1,100 barrels per day, Badami production remains well below original estimates, but is much healthier than the stop and start days of the turn of the century.

Outside the boundaries

In development plans filed with the State of Alaska, Glacier has often mentioned opportunities around its existing property — prospects just beyond the unit boundaries or just outside existing participating areas.

In its last development year, Savant completed several maintenance projects at Badami.

The company conducted gas lift optimization on the Starfish B1-07 well, which improved production by some 15%.

Savant also conducted production logging on the B1-36 well, which help identify and mitigate water intrusion into the well. In April 2022, it added 47 feet of perforations to the B1-36 well.

In its current plan of development, running through July 15, 2023, Glacier subsidiary Savant proposed a range of small development projects, all reliant on funding, oil price, etc.

Savant told the State it plans to log the B1-38 well and possibly add perforations in the Brookian section of the reservoir, in addition to the existing production from the Killian.

Badami East

For several years, Savant has been evaluating prospects in the Badami and Killian sands at the unit. The company has identified several prospects in these two sands.

Of those prospects, three could be drilled from the existing Badami pad but the remainder would require construction of a new drilling pad, currently being called the Badami East pad.

The Badami East pad would be a satellite, connected back to the main Badami pad by an 8-inch three-phase production pipeline and a 2-inch gas supply pipeline.

Savant wanted to advance the project as part of a multi-well drilling program in the Lion and Rhino Killian prospects. But given the uncertainty of economic conditions in 2020 and 2021, the company deferred the drilling, as well as the pad.

In the current plan of development, approved by the State of Alaska in June, Savant was looking to drill at least one well into the Killian 28 reservoir this coming winter.

Savant also planned to conduct geologic evaluations to identify potential drilling targets on 1,280-acres of newly acquired property south of the existing Badami unit.

see **GLACIER SALE** *page 11*

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GLACIER SALE

The current development plan also includes some facility work. Savant wants to relocate a newly installed wastewater treatment plant to improve access and operations at the Badami main pad, to upgrade a communications system, and to convert some of its propane-powered thermoelectric generators to run on natural gas.

But these plans from the November Producers magazine were not listed in Glacier's Jan. 9 report to Petroleum News, so stay posted for further information from the company.

Cook Inlet basin

The same is true for Glacier's operating company in the Cook Inlet basin, Cook Inlet Energy, which has been analyzing options at the Redoubt unit and at the West McArthur River unit, per the Producers magazine.

The two offshore units are classic Cook Inlet properties: aging stalwarts in need of regular investment but also capable of significant growth.

In June 2020, with the delivered spot price of Alaska North Slope crude oil hovering around $30 to $40 per barrel, the state allowed the Glacier subsidiary to suspend operations at West McArthur River and Redoubt.

Cook Inlet Energy, or CIE, brought the two units back online in the fourth quarter of 2021 and is now working under its second full development plan for the units since that restart.

Stewart Petroleum Co. brought the West McArthur River unit online in the early 1990s. The offshore unit currently includes 6,970 acres, 11 wells and two participating areas. Operators came and went until CIE acquired the property in 2009.

GLACIER OIL & GAS

Pontem's Managing Partner Jeff Bartlett said … "We expect to supplement Glacier's operating cash flow with outside capital to generate attractive returns by drilling additional wells within Glacier's North Slope and Cook Inlet assets."

West McArthur River's current plan of development runs through April 2023.

The unit's most interesting exploration prospect is Sabre in a corner of the unit.

Former Cook Inlet operator Forcenergy shot 3-D seismic over Sabre, describing it as a 50 million to 100 million barrel prospect.

The project has been delayed by the difficulty of drilling an extended reach well from onshore, but with the arrival of a jack-up rig in Cook Inlet, the cost of exploration has reportedly come down.

Redoubt discovered 1960s

Pan American discovered the Redoubt Shoal field in the late 1960s. The Redoubt unit was formed in 1997 with production from the Hemlock participating area.

CIE acquired the unit in 2009.

The overall program at Redoubt is similar to West McArthur River: maintenance on existing wells, plans to address high water volumes and prospects for expansion.

As part of its previous plan of development, the company undertook a wide range of maintenance projects.

As with the Sabre prospect at West McArthur River, CIE deferred work on a proposed development at an expansion property called the Northern fault block. In its current plan, the company said it "plans to keep its options open" at both the Northern and Southern fault block by seeking partners to reduce the risk factors for development.

SEP's President Andrew White stated … "Stephen and his team at Glacier have proven their leadership in safety culture with no lost time accidents in eight years and in operating culture with consistently strong environmental and financial results."

Associated with Redoubt are the Osprey platform and the onshore Kustatan Production Facility.

The company recently installed a new subsea pig launcher on the pipeline to the platform. In its current plan, CIE is planning inspections and upgrades at these two facilities. ●

Contact Kay Cashman at publisher@petroleumnews.com

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