



## Court remands ANWR boundary case to IBLA to consider 1951 maps

U.S. District Court Judge Sharon Gleason ruled March 9 in favor of the state of Alaska on the state's motion to supplement the administrative record in a case based on appeal of a 2020 decision by the Interior Board of Land Appeals.

The issue before the IBLA involved some 20,000 acres on the boundary of the Arctic National Wildlife Refuge between the Canning and Staines rivers and along the northwestern boundary of ANWR which the state claims. The U.S. Department of the Interior disagrees.

The case is based on Public Land Order No. 2214 issued by the U.S. Fish and Wildlife Service in 1960 which established ANWR. The state claims some 20,000 acres and has requested that acreage be conveyed to it; Interior's Bureau of Land Management rejected the state's request. BLM also filed a Notice of Filing of Plats of Survey describing formally a portion of the disputed land based on a 2012 survey adopting a boundary along the Staines River. The state protested.

The state appealed those actions to the IBLA, which affirmed the actions in 2020. The state seeks judicial review of the decision pursuant to the Administrative Procedure Act.

"At the heart of the challenged IBLA decision is the meaning

see **BOUNDARY CASE** page 10

## Makushin work progresses; Karl sees geothermal potential on chain

Ounalashka/Chena Power LLC is moving ahead with the construction of a 36-megawatt geothermal power plant on a flank of the Makushin Volcano on Unalaska Island in the Aleutians. But Bernie Karl, OCCP president and co-director, told a meeting of the Commonwealth North Energy Policy Group on March 3 that this project could be the beginning of something much larger, given the amount of potential geothermal energy from the more than 50 volcanoes along the Aleutian island chain.

While the resource potential from the Makushin Volcano is around 563 megawatts, the Aleutians in total have a geothermal resource potential of 250,000 megawatts, Karl said.

"We're on the Ring of Fire. We could produce enough energy on the Ring of Fire to take care of all of the energy needs of the world," he said.

In addition to the possibility of producing green hydrogen through the electrolysis of water using geothermal electricity,

see **GEOTHERMAL POTENTIAL** page 10

## Amendments to Ninilchik POD for 4 wells, 2 each at Paxton, Pearl

Hilcorp Alaska has received approval from the Alaska Department of Natural Resources' Division of Oil and Gas to add three wells to its Ninilchik unit plan of development: Paxton 12, Pearl 10 and Pearl 11.

A separate plan of operations amendment decision includes a second Paxton well, Paxton 13.

The division said in its March 6 approval of an amendment of the 18th plan of development for Ninilchik that Hilcorp plans to drill the three wells in the first quarter of the year.

Hilcorp also applied to the Alaska Oil and Gas Conservation Commission for spacing exceptions for the wells. It told the commission it planned to spud the first well around March 1, but as of March 10, no drilling permits for the wells had been issued by the commission.

Hilcorp described the wells as "delineation wells targeting unproven reserves in the Beluga and Tyonek Formations within the Undefined Gas Pool and within the Beluga/Tyonek

see **WELL ADDITIONS** page 9

### EXPLORATION & PRODUCTION

# Willow OK'd

Option of 4th pad dropped; 68,000 acres relinquished; Arctic drilling ban

By **KRISTEN NELSON**

Petroleum News

No new Arctic Ocean leasing, but the long-planned Willow project in the National Petroleum Reserve-Alaska can move forward — unless it is stopped in court.

On March 12, the Biden administration announced what it called "sweeping action to complete protections of the entire U.S. Arctic Ocean from any further oil and gas leasing." In addition, the U.S. Department of Interior said it was "preparing new rules to provide maximum protection to millions of acres of lands in the western Arctic, including the area around Teshekpuk Lake."

ConocoPhillips said in a March 13 statement that it has "completed extensive preparations with key contractors and expects to immediately initiate gravel road construction activities."

On March 13, Interior issued a record of decision for Willow, denying two of the five drill sites proposed by ConocoPhillips Alaska and dropping the option to consider future development of one of the dropped drill sites. ConocoPhillips relinquished leases it holds on some 68,000 acres in the

see **WILLOW APPROVAL** page 11

### EXPLORATION & PRODUCTION

# ANS exploration tally

North Slope winter wells total 2; ConocoPhillips Alaska & 88 Energy

By **KAY CASHMAN**

Petroleum News

Two exploration wells are being drilled this winter on Alaska's North Slope: Bear 1 by ConocoPhillips Alaska Inc. and Hickory 1 by 88 Energy Ltd.

ConocoPhillips Alaska planned to begin drilling the Bear 1 wildcat on oil and gas lease ADL 393519 on Feb. 25 and finish by March 25.

When asked by Petroleum News for an update on Bear 1 drilling, company spokeswoman Rebecca Boys said in a March 13 email, "I am told by the team that Bear is progressing as planned."



**EREC ISAACSON**

The well is being drilled by the Doyon Arctic Fox rig.

According to the 2023 Bear 1 Exploration Program Lease Plan of Operations, which was submitted by the company on Sept. 8, and amended and approved by Alaska's Division of Oil and Gas on Dec. 16, the Bear 1 project is on non-unitized state lands west of the central North Slope that extend south of Alpine, approximately 22 miles south of Nuiqsut, and 4 miles east of the Colville River.

Per a state lease map, it is part of a block of ConocoPhillips Alaska-held leases that are bordered

see **EXPLORATION TALLY** page 7

### FINANCE & ECONOMY

# Oil price contagion

ANS off \$8.58 for the week as bank runs panic US and EU financial markets

By **STEVE SUTHERLIN**

Petroleum News

Global financial assets continued a wild ride March 15, finishing lower as Credit Suisse joined Silicon Valley Bank and Signature Bank on the list of wobbly banks with liquidity issues which have put investors into a panic.

Oil was not excluded from the sell off; major benchmarks tumbled to levels not seen for more than a year.

Alaska North Slope crude plunged \$3.55 March 15 to close at \$71.70, while West Texas Intermediate plummeted \$3.72 to close at \$67.61 and Brent plummeted \$3.76 to close at \$73.69.

Growth in China's crude demand is potentially bullish for the pricing of ANS crude.

The nosedive followed sharp losses March 14, which saw ANS sink \$3.10 to close at \$75.25, as WTI sank \$3.47 to close at \$71.33 and Brent shed \$3.32 to close at \$77.45.

On March 13 ANS slumped \$1.92 to close at \$78.35, WTI fell \$1.88 to close at \$74.80 and Brent shed \$2.01 to close at \$80.77.

From Wednesday to Wednesday, ANS collapsed

see **OIL PRICES** page 8



● ALTERNATIVE ENERGY

# DEC has regs out for microreactor siting

Comments on draft regulations are due by May 11; US Nuclear Regulatory Commission issues license or permit for the microreactor

By KRISTEN NELSON  
Petroleum News

The Alaska Department of Environmental Conservation has draft regulations for the siting of microreactors out for public comment, with comments due by May 11.

A license or permit from the U.S. Nuclear Regulatory Commission is required for a microreactor, DEC said in a March 9 press release, along with a siting permit from DEC and approval from the municipality or borough where there is local jurisdiction, or from the Legislature if the site is in an unorganized borough.

“In preparation for future commercial use of this sustainable, affordable, and reliable energy resource, DEC is developing regulatory requirements to provide our communities with the information they need to explore clean energy options for use at the local level,” DEC Commissioner Jason Brune said in a March 9 statement.

DEC said the regulations were drafted in support of the governor’s Office of Energy Innovation and in response to the U.S. Air Force Microreactor Pilot Program, expected to

have the first microreactor operational at Eielson Air Force Base by the end of 2027.

Microreactors are small nuclear reactors which can operate independently of an electric grid, producing roughly 1 to 50 megawatts, DEC said. Most of the small reactors are factory assembled and the reactor core transported to the site as a pre-fueled and sealed module which acts as a nuclear battery and provides energy for up to a decade without requiring refueling.

“Microreactors will be transformative for Alaska,” said Gov. Mike Dunleavy. “They can deliver clean, safe, carbon free energy in areas on and off the road system. The draft regulations are an important step to revolutionizing energy production in our state.”

DEC said its role is solely in the siting of a microreactor facility, with the U.S. Nuclear Regulatory Commission addressing licensing, construction, operation, safety and security.

The draft regulations begin with a pre-application requirement: at least 120 days before submitting an application a preliminary application is required including a fact sheet describing the proposed facility, with publication required and certified mail delivery to DEC and the municipality with jurisdiction or — if the facility is in an unorganized borough — to the Legislature and the mayor of the nearest municipality.

Once the pre-application requirements are completed, a completed application is submitted to DEC including a copy of an early site permit granted by the U.S. Nuclear Regulatory Commission.

Upon receiving a complete application DEC will make a preliminary decision to issue or deny a permit and if it decides to issue a permit, DEC will prepare a draft permit and make it available for public comment.

DEC will request approval or denial of the draft permit from the municipality where the facility is to be sited, or from the Legislature if the proposed site is in an unorganized borough. The draft regulations include numerous location requirements for siting of a microreactor facility.

There will be a 30-day public comment period on the draft permit.

If DEC approves the application it will issue a facility siting permit. It may terminate a siting permit for any false statement in the application or materials submitted “when a true answer would have warranted a denial of the permit” or for failure to comply with terms or conditions of the siting permit.

The draft regulations are available on DEC’s website (<https://dec.alaska.gov/>) under public notices. ●

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• UTILITIES

# RCA order dings CEA over power pooling

*Says that utility infringed terms of agreement with MEA through unilateral imposition of change in gas pricing for pooled energy*

By **ALAN BAILEY**  
For Petroleum News

On March 3 the Regulatory Commission of Alaska issued an order negating a decision by Chugach Electric Association to unilaterally alter the power pricing arrangements for tight power pooling between Chugach Electric and Matanuska Electric Association. The commission characterized Chugach Electric’s unilateral action as “an unreasonable management practice.”

The RCA mandated the power pooling arrangement as one of the conditions under which the commission approved Chugach Electric’s acquisition of Municipal Light & Power in 2020. Under an approved tariff for the tight power pool, there was to be an 18-month implementation period, starting on Nov. 2, 2020. The implementation of the tight pool arrangements subsequently proceeded, as planned, with the actual tight pooling starting in April 2021 and continuing thereafter. The full implementation of the tight pool arrangements was to be completed by April 2022.

**Maximum use of most efficient generation**

The concept behind the tight pool is that the utilities share power generation output in a manner that makes maximum use of their most efficient power generation facilities, thus minimizing the cost of power for electricity consumers. In Anchorage Chugach Electric operates two state-of-the-art combined cycle gas fired power stations: the Southcentral Power Project and the George M. Sullivan Plant. To the north of Anchorage MEA operates the modern Eklutna Generation Station. Chugach Electric’s two combined cycle plants work most efficiently when operating at maximum capacity. MEA’s EGS plant uses an array of gas-fueled reciprocating engines, an arrangement that enables the rapid ramping up and down of power output, to follow variations in power demand or power output from other generation facilities.

**Sharing the cost savings**

A complication arises from the manner in which the utilities share the cost savings from the power pooling, given that each utility is operating its own power generation — a business arrangement is needed whereby the utilities can equably benefit from the shared generation. Under an agreement between the two utilities, the utilities ran a model for calculating the daily cost savings from the power pooling, with these savings being equally split between the utilities.

However, in December 2021 Chugach Electric notified MEA that from Jan. 1, 2022, Chugach Electric was going to offer power pooling transactions at a fixed price of \$13 per megawatt hour. MEA notified Chugach Electric that it did not agree with this fixed price methodology and that the price was too high to justify purchasing power from Chugach Electric. In response, Chugach Electric reduced the fixed price to \$10.75 per megawatt hour. MEA then said that it would not make power pool transactions under these terms — power pooling subsequently ceased for about 10 days. The pooling then restarted and has continued at a fixed settlement price of \$10.30 beyond the April 2022, target time for

*The RCA mandated the power pooling arrangement as one of the conditions under which the commission approved Chugach Electric’s acquisition of Municipal Light & Power in 2020.*

finalizing the tight pool arrangements.

On March 3, 2022, the RCA opened a docket to investigate the situation. In its subsequent brief in the docket, Chugach Electric argued that there had been major flaws in the settlement arrangements for the gas pricing. The utility said that it would likely take several months to develop a new settlement procedure and that, meantime, the utilities should price their pooled gas using their economy energy sales pricing, the price that the utilities normally use for selling power to each other outside of a tight pool. Chugach Electric said that it believed that this change in pricing arrangements was consistent with the power pooling agreement between the two utilities.

MEA disagreed, arguing that Chugach Electric had unilaterally discontinued the use of the agreed gas price settlement method by reverting to “loose pool” arrangements at a fixed price.

**Agreed responsibility for settlement process**

In its March 3, 2023, order, closing the docket, the commission said that, under the terms of the power pooling agreement between Chugach Electric and MEA, an operating committee with representation from each utility has the responsibility to develop, establish and implement the settlement process for power pooling transactions.

The commission found that, following implementation of the power pool, transaction settlements had continued under the initial agreement approved by the operating committee for an equal split of power pool savings. There is no evidence for an operating committee decision to change this agreed mechanism, the RCA

order says. Thus, in failing to settle power pool transactions under this mechanism after Jan. 3, 2022, Chugach Electric has been in breach of the power pooling agreement, the commission found.

Consequently, power pool transactions must now revert to that equal split mechanism, as approved by the operating committee, the RCA ordered. Furthermore, Chugach Electric must issue corrected invoices for power pool transactions that took place after Jan. 3, 2022, through March 3, 2023, the commission ordered.

The commission also warned the utilities that it is considering opening two new dockets. One docket would investigate whether the power pool settlement operating procedure needs to be approved by the RCA and to be included in the utility tariffs. The other docket would investigate why the utilities have not completed their implementation of their tight pool arrangements within the timeframe required under the terms for the ML&P purchase. ●

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## EXPLORATION & PRODUCTION

### Foothills areas closed to offroad travel

The eastern and western North Slope coastal areas remain open to offroad travel, the Alaska Department of Natural Resources’ Division of Mining, Land and Water said in a March 13 update, but the foothills areas remain closed.

The division said it has completed an assessment of snow conditions and soil temperatures with all tundra opening areas sampled March 8.

Snow conditions in both the eastern and western coastal areas of the Slope remain good, although weather patterns and ambient temperatures have been variable over the last few weeks, the division said.

At most monitoring stations in the lower and upper foothills wind slab has softened.

Both coastal areas remain open. The eastern coastal area opened Jan. 4 and the western coastal area opened Dec. 16.

Neither foothills area has opened; both remain closed.


In the lower foothills area average snow depths have decreased due to warm temperatures and wind, resulting in widespread exposed vegetation. “The slab was weak; it was barely strong enough to support an average person’s weight,” the division said. The soil temperatures at all stations have reached the required minus 5 degrees C at a depth of 30 centimeters.

In the upper foothills, snow was slushy and the average snow depth had decreased from 6.9 inches to 3.65 inches. “Large areas of exposed vegetation were observed,” the division said, although soil temperature requirements had been met at three of four monitoring stations.

The division said staff will return to the Slope in early to mid-April to continue monitoring snow conditions and temperatures.




*Snow conditions in both the eastern and western coastal areas of the Slope remain good, although weather patterns and ambient temperatures have been variable over the last few weeks, the division said.*

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GOVERNMENT

# Court sides with feds on NPR-A data release

*Finds AOGCC does not have right to release data filed with it by ConocoPhillips for National Petroleum Reserve-Alaska drilling*

By **KRISTEN NELSON**  
*Petroleum News*

U.S. District Court Judge Sharon Gleason has found in favor of ConocoPhillips Alaska in a case the company brought against the Alaska Oil and Gas Conservation Commission over release of well data from the National Petroleum Reserve-Alaska.

NPR-A is managed and leased by the U.S. Bureau of Land Management under federal law, but under Alaska law, wells are permitted by AOGCC, which releases well data after 25 months unless the commissioner of the Alaska Department of Natural Resources finds that there is unleased land in the vicinity.

Under federal law, public release of well

data occurs only when a lease is relinquished.

Gleason said in a March 8 decision that Alaska’s disclosure laws are preempted by federal law.

**NPR-A**

NPR-A, formerly Naval Petroleum Reserve No. 4, was established in 1923, the court said, with the goal of assuring that the U.S. Navy’s ships would have adequate petroleum supplies. When the Organization of Petroleum Exporting Countries embargoed oil in the 1970s, that “established that the Nation had a need for oil that exceeded the needs of the Navy,” the court said, and in 1976 Congress enacted the Naval Petroleum Reserves Production Act, transferring NPR-A management to Interior.

Initially, the NPRPA only allowed the federal government to explore, but the act was amended in 1980 by an appropriations rider which directed Interior to open NPR-A to private exploration and establish a competitive leasing program. The rider was codified in federal statute and governs NPR-A oil and gas leasing.

The rider directs that NPR-A lease sales will be based on bidding systems in the Outer Continental Shelf Lands Act. The rider subjects information from NPR-A geological and geophysical exploration to the conditions of the oil and gas information program subsection of OCSLA, which has a provision providing for confidentiality of privileged or proprietary exploration information received by Interior and “expressly preempts” state or local laws providing for public access to that privileged information.

the data provided to BLM.

The court looked at the intent of Congress when it passed the NPRPA rider. Congress had requested a study to determine the best procedures in leasing, prior to enacting the rider, and the resulting report was issued in December 1979, the court said.

“The Rider cites to the Report, and it is thus reasonable to assume Congress relied upon the Report when drafting the Rider,” the court said.

The report said the government’s role in a private sector program in NPR-A would be similar to its role in managing OCS oil and gas operations, the court said, and compared an NPR-A leasing program to the OCSLA program. The report also makes clear the value to competitors of exploration information, and recommends that to maintain a competitive edge for companies that are exploring, exploration information should only be released after leases are relinquished.

The court found that based on the testimony it received, Congress “recognized the need to keep exploration information confidential in a private leasing program such as the one authorized by the Rider.”

The court found that state disclosure laws are an obstacle to what Congress intended to accomplish “and are preempted by the OCSLA Oil and Gas Information Program as incorporated into the NPRPA Rider.” ●

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## CORRECTION

### AOGCC letter incorrectly described

Petroleum News made an error in describing the contents of a letter from the Alaska Oil and Gas Conservation Commission to the U.S. Environmental Protection Agency. The letter was mentioned in an article on the governor’s geothermal and CCUS bills in the March 12 issue of Petroleum News.

The letter, sent to EPA as an email, was a notice of intent to participate in EPA’s Underground Injection Control Class VI grant program. It also said AOGCC would apply for Class VI primacy.

In the PN story there was no mention of the grant program.

The letter’s header reads: “Letter of Intent from Alaska for the Underground Injection Control (UIC) Class VI Grant Program.”

A revised fiscal note from the agency reflects the potential federal funding for this program.

Petroleum News apologizes for the error.



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● EXPLORATION & PRODUCTION

# Hilcorp submits 48th plan for Lewis River

POD for Cook Inlet west side field includes 1 well, spudding as early as June 30, targeting Sterling, Beluga, and/or Tyonek sands

By KAY CASHMAN  
*Petroleum News*

Hilcorp Alaska operates four natural gas fields on the west side of Cook Inlet, including the tiny Lewis River unit for which the company recently submitted its 48th annual plan of development, or POD. Referred to as the 2023 POD, the 48th plan runs from June 1 through May 31, 2024.

Hilcorp became 100% working interest owner and operator at Lewis River on Jan. 1, 2012, as part of its 2011 acquisition of Chevron’s Cook Inlet assets.

The 620-acre onshore unit was formed by Cities Service Oil Co. in 1977 and went online in 1984.

In its report on work done during the 2018 POD at Lewis River Hilcorp said it “worked on a comprehensive field study,” evaluating the Sterling, Beluga and Tyonek reservoirs for further development, including study of what efficiencies would be pursued.

Lewis River averaged 374 mcf per day in January, down 62.7% from a January 2022 average of 1,003 mcf per day.

### Recent POD activity

Under the Lewis River unit’s 2021 POD Hilcorp perforated Sterling A sands in the Lewis River A1 well but reported the work was unsuccessful.

Under the 2022 plan from June 1, 2022, through May 31, 2023, Hilcorp said it would continue to evaluate delineation drilling opportunities with the Sterling-Beluga and Tyonek participating areas, with various non-rig well projects planned.

As with the previous POD, throughout the 2022 POD period, Hilcorp continued to produce from the Lewis River Gas Pool #2 participating area, or PA. Also, as with the 2021 POD, there was no production from the Lewis River Gas Pool #1 PA.

### 2023 plan activities

The long-range proposed development activities for the unit include plans to delineate all underlying oil or gas reservoirs and get them into production and maintain and enhance production once established.

However, the company does not have any long-range proposed development activities for the unit dur-

ing the 2023 POD period.

Hilcorp also does not have any exploration plans for the 2023 POD.

The company does plan to maintain production from the Lewis River Gas Pool #2 PA throughout the 2023 POD period.

In what it calls its drill well program, Hilcorp plans to drill the LRU C-02 well spudding as early as June 30, and targeting Sterling, Beluga, and/or Tyonek sands.

In Hilcorp’s wellwork and workover program, it plans to “perform various non-rig well projects” during the 2023 POD period. These projects may include:

- Coil cleanout operations.
- Adding (or isolating) Sterling or Beluga sand perforation.

At this time, Hilcorp said no major facility upgrades are planned during the 2023 POD.

Finally, Hilcorp does not have any exploration or delineation activities planned in the 2023 POD. ●

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● EXPLORATION & PRODUCTION

# US rotary drill rig count down 3 to 746

By KRISTEN NELSON  
*Petroleum News*

The Baker Hughes’ U.S. rotary drilling rig count was down by three for the week ending March 9 to 746, and up 83 from a count of 663 for the same period a year ago. The count has dropped for four weeks in a row, and for six of the past eight weeks, down from 771 rigs Jan. 20 after reaching a high for 2022 of 784 at the beginning of December.

When the count dropped to 244 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 prior to the COVID-19 pandemic, 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 March 9 count includes 590 rigs targeting oil, down two from the previous week and up 63 from 527 a year ago, with 153 rigs targeting natural gas, down one from the previous week and up 18 from 136 a year ago, and three miscellaneous rigs, unchanged from the previous week and up by two from a year ago.

Forty-two of the rigs reported March 9 were drilling directional wells, 692 were drilling horizontal wells and 12 were drilling vertical wells.

Alaska (10) was up by three rigs from the previous week.

West Virginia (14) was up by two rigs week over week and Colorado (18) was up by a single rig.

Louisiana (59), New Mexico (103) and Pennsylvania (22) were each down by three rigs.

Rig counts in other states were unchanged from the previous week: California (2), North Dakota (41), Ohio (14), Oklahoma (61), Texas (366), Utah (11) and Wyoming (20).

Baker Hughes shows Alaska with 10 rotary rigs active March 9, up by three from the previous week and up by two from a

year ago, when the state’s rig count stood at eight. All 10 of the Alaska rigs were onshore, an increase of three 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 down by six from the previous week at 343 and up by 27 from 316 a year ago. ●

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• THIS MONTH IN HISTORY

# Anadarko well finds pay, low permeability

20 years ago this month: Company reports on Altamura 1 in NPR-A, drilled in 2001-02; also notes successful Lookout appraisal

*Editor's note: This story appeared in the March 23, 2003, issue of Petroleum News Alaska.*

By KRISTEN NELSON

Petroleum News

The Altamura No. 1 well in the National Petroleum Reserve-Alaska, Anadarko Petroleum Corp.'s first operated well on the North Slope, encountered pay with low permeability, the company said in a recent filing with the U.S. Securities and Exchange Commission. It is the first indication of what the Altamura prospect, drilled in the 2001-2002 winter drilling season, might contain.

"Pay means they hit hydrocarbon bearing rocks or a formation," which is good news, a state official told Petroleum News Alaska March 19, 2003.

"Permeability is standardized measurement of how easy a fluid, such as oil, will flow through a given unit of rock, because if the flow channels are very narrow and full of clay and silt then fluid can't flow as easily as if the channels are large and don't have a lot of debris in them. For example, clean sand has high permeability, whereas clay does not," he said.

Producers of many North Slope reservoirs encounter permeability problems, the state official said, including the prolific and nearby Alpine reservoir.

"Low permeability means the well

would produce, in relative terms, at lower rates. Permeability affects the flow rate, but not how much oil and gas is in the reservoir," he said.

There are two common ways to address permeability problems on the North Slope. "You can drill vertical wells and fracture them or drill long, horizontal wells like they've done at Alpine, exposing a lot of the reservoir to well bore. Some of the Alpine horizontal wells are 3,000 feet long. ... Either way, you can substantially increase your flow rate," he said.

The Prudhoe Bay reservoir, he said, is "a high permeability reservoir. You can drill vertical wells and they flow at thousands of barrels a day with no stimulation at all."

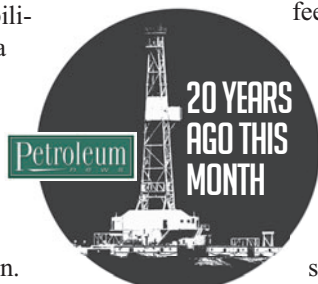
## Anadarko renews drilling permit for Altamura No. 2

Anadarko said it had temporarily abandoned Altamura No. 1. Preliminary data released on the well in June said it was suspended April 11, 2002, at a measured depth of 9,100 feet and a true vertical depth of 9,041 feet.

The federal Bureau of Land Management said Anadarko's drilling permit for Altamura No. 2 had expired in early January but was renewed on Jan. 17, making it good for another year.

Anadarko has not said if it intends to drill the Altamura No. 2 next season.

When the Bureau of Land Management



JUDY PATRICK

Hoping for another success story like Alpine, Anadarko drilled Altamura, an oil target, in March 2002.

did an environmental assessment of proposed Altamura exploration drilling the agency said the purpose of the project was to delineate the potential southern extension of the oil and gas formation discovered on nearby leases.

Altamura is the farthest south of current NPR-A exploration wells, some four miles south of the Rendezvous discovery.

## Good news on Lookout well

Anadarko also said it had "successfully appraised the Lookout discovery," referring to the Lookout No. 2 well, drilled in the 2001-2002 North Slope winter drilling season. Anadarko is a partner in Lookout with Phillips Alaska Inc. (now ConocoPhillips Alaska).

Lookout was one of several NPR-A discoveries announced in May 2001 by Phillips Alaska, the operator, and its partner Anadarko. The companies said five wells and a sidetrack drilled in the 1999-2000 and 2000-2001 winter drilling seasons — all targeting the Alpine interval — encountered oil or gas and condensate. The wells included: Spark No. 1 and Spark No. 1A, Moose's Tooth C, Lookout No. 1 and Rendezvous A and Rendezvous No. 2.

Anadarko said in its SEC filing that the Lookout No. 2 "encountered the Alpine equivalent reservoir" and tested at 4,000 barrels a day of oil and 8 million cubic feet a day of gas after fracture stimulation.

"An Alpine equivalent reservoir means they found a reservoir the same age as the Alpine reservoir," the state official said.

"The challenge on the North Slope is finding good reservoir rock because we know there was a lot of oil generated up there, but finding good reservoir rock where it has been trapped is the challenge. The Alpine reservoir has been very successful," he said.

Anadarko also said the Spark, Moose's Tooth and Rendezvous accumulations in the same vicinity in NPR-A "require further delineation drilling and testing."

## ASRC leases in the works

Anadarko told the SEC that it had interests in 3.14 million acres gross (1.2 million acres net) of undeveloped lease acres, 25,000 gross (6,000 net) acres of developed lease acreage and 16,000 gross (8,000) net fee acres at year-end 2002.

The company said it is also finalizing agreements on 181,000 gross (60,000 net) acres in the Foothills area of the North Slope from Arctic Slope Regional Corp. This is under an exclusive option-to-lease agreement which has been in effect with ASRC since 1998; terms of that agreement are confidential.

Anadarko said it retains the right to acquire leases on an additional 1.94 million gross (647,000 net) ASRC acres based on the option-to-lease agreement.

In NPR-A, Anadarko said, it has lease interests totaling 910,000 gross (289,000 net) acres.

The company said that in total it has "access to approximately 5,380,000 gross (1,923,000 net) acres in Alaska through current and pending leases or options." ●

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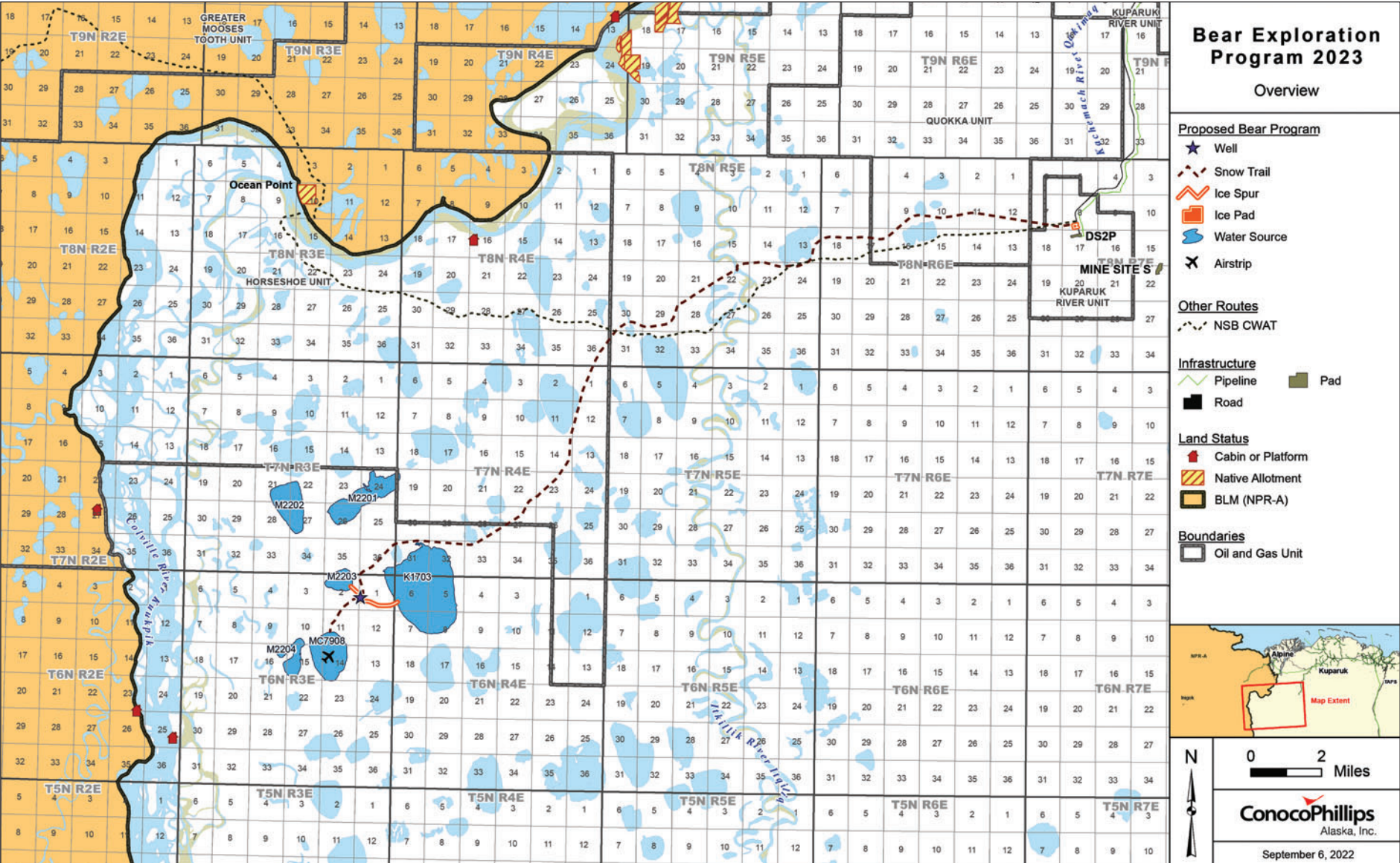
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This Bear 1 exploration program 2023 map, supplied by ConocoPhillips Alaska at the request of Petroleum News, shows the well’s proximity to OSA’s Horseshoe unit, which contains the Horseshoe discovery. The map does NOT show the location of OSA’s 2020 Stirrup discovery, which appears on trend with Bear 1. But since the map only identifies units and not discovery wells, that is understandable.

continued from page 1

## EXPLORATION TALLY

on the north and east by Oil Search (Alaska), or OSA, operated leases.

In studying available maps and a G&G team’s comments, Bear 1 appears to be on trend with OSA’s 2020 Stirrup discovery.

Bear 1 will be approximately 12 miles south of Stirrup 1, which had one of the highest flow rates of any Nanushuk single-stage stimulation of a vertical well on the North Slope.

Stirrup 1 successfully penetrated the Nanushuk reservoir and encountered an oil column with net pay of 75 feet. The well-bore was cored, perforated through a single-stage simulation and shut-in for six days to enable pressure build-up prior to testing in which Stirrup flowed at a stabilized rate of 3,520 barrels of oil per day.

As previously reported, ConocoPhillips Alaska President Erec Isaacson described the company’s Bear 1 well as a Brookian Topset play.

“A Brookian Topset is exactly what we drilled at Pikka, Horseshoe, Stirrup, Mitquq and ... CP drilled at Willow. CP knows what they are doing. I give the Bear well a high chance of success based on what we know,” Bill Armstrong said in response to a query from PN.

Bear 1 is also approximately 11 miles south southwest of the Horseshoe discovery.

The Horseshoe 1 and 1A wells drilled by Armstrong during the 2016-17 winter campaign confirmed the Nanushuk play in the Pikka-Horseshoe area as one of the largest onshore conventional hydrocarbon discoveries in the United States in 30 years.

Per OSA reports, Stirrup 1 is a direct analogue to the Horseshoe 1 and 1A Nanushuk discovery.

The Bear 1 project was scheduled to begin Jan. 20.

A 30-mile-long snow trail was to be built to access the site from the DS-2P pad in the Kuparuk River unit. An ice pad, measuring 500 feet by 500 feet, was to be built at DS-2P to stage equipment and house a mobile camp.

The Bear 1 drilling ice pad was to measure 700 feet by 700 feet for a total area of 11.25 acres.

All Bear 1 operations were to be performed from the ice pad. All facilities were to be temporary, including an airstrip.

In the lease plan of operations approved by the division, the well was to be plugged and abandoned starting March 25 and finished by April 5.

Completion and demobilization was to begin April 10 and finish by April 25.

Summer activities were to start July 5 and finish by Aug. 31.

### Hickory 1 spud March 9

88 Energy’s operator Accumulate Energy Alaska Inc commenced drilling the Hickory 1 exploration well with Nordic

Calista’s Rig-2 on March 9.

Hickory 1, which is about 30 miles south of Deadhorse, is in what 88 Energy calls Project Phoenix on the North Slope of Alaska.

According to the lease plan of operations approved by Alaska’s Division of Oil and

Gas, Hickory 1 is designed to appraise up to six conventional reservoir targets within what 88 Energy calls the SMD, SFS, BFF and KUP (Kuparuk) reservoirs and is permitted to a total depth of up to 12,500 feet.

see **EXPLORATION TALLY** page 8

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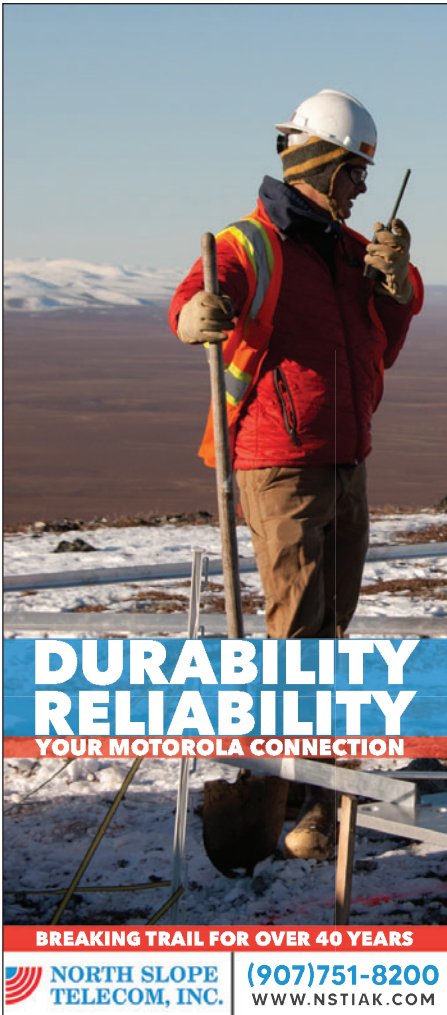
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## EXPLORATION TALLY

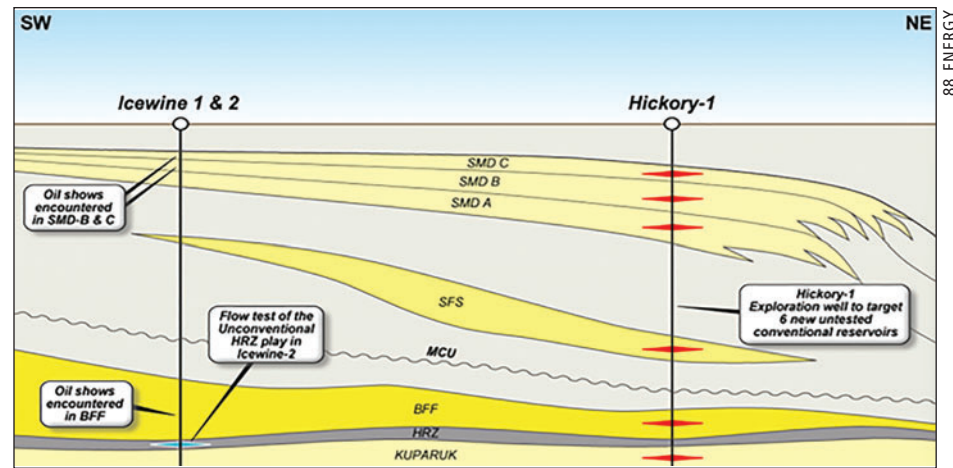
The primary targets are the three SMD reservoirs (SMD-C, B and A), with SFS and BFF reservoirs considered secondary targets. The Kuparuk reservoir, the deepest zone, is a tertiary target and will be drilled subject to remaining time in the season, borehole conditions and other technical considerations, 88 Energy said in a March 10 statement.

Hickory 1 was to be initially drilled to 3,500 feet, with surface casing installed and the blow-out preventer system tested. This was anticipated to collectively take up to two weeks.

Drilling to total depth was then expected to take a further two weeks, including logging while drilling, or LWD, at which point wireline logging was scheduled.

LWD and mudlogging will provide initial indications as to the prospectivity of the Hickory 1 targets, the company said.

"The wireline program has been specifically designed to collect essential data, necessary to optimize the future flow testing program. This includes multiple side wall coring runs and other specialized tools to enable detailed reservoir characterization," 88 Energy said.



Hickory-1 well designed to test up to 6 stacked target.

Flow testing of the Hickory 1 well was planned for the 2023-24 winter season, subject to well results.

"This provides ample time post-drilling to optimize the flow test program, design, permitting and implementation," 88 Energy said.

The project area is on state lands; none of which are jointly managed.

Hickory 1 project components are the pad and well, which will be located at meridian, township, range and section Umiat, T005N, R014E, Sec 19.

Per the lease plan of operations, demobilizing the drill rig, camp and support opera-

tions will begin on April 5 and finish on April 30.

Clean up, remediate ice infrastructure — pad and road areas — will start on July 1 and finish on Aug. 20.

The pad will be located 400 feet west of the Dalton Highway, approximately 0.3 miles south of Milepost 382.

The well will be situated on a 600-foot by 600-foot ice pad, for a total of 8.26 acres, and connected to the Dalton Highway by a 500-foot-long ice road. ●

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## OIL PRICES

\$8.58 from its March 8 close of \$80.28 to \$71.70 March 15, making a significant breakdown from a trading pattern established in late 2022 that saw the Alaska benchmark trading plus or minus several dollars of the \$80 level.

With the crisis of confidence now infecting the United States and Europe, oil traders fear descent into a sustained economic downturn that would pummel demand for oil and gas. Oil and gas related equities moved sharply lower on both continents.

A U.S. inventory build added additional gloom to the oil trading scenario.

U.S. commercial crude oil inventories for the week ending March 10 expanded by 1.6 million barrels from the previous week to 480.1 million barrels, 7% above the five-year average for the time of year, the U.S. Energy Information Administration said in its March 15 report.

Analysts in a Reuters poll had expected a 1.2 million barrel rise.

Total motor gasoline inventories fell however, down 2.1 million barrels for the period, 3% below the five-year average for the time of year, the EIA said. Distillate fuel inventories decreased as well, down 2.5 million barrels to 8% below the five-year average for the time of year.

The U.S. dollar gained ground against a basket of currencies, with the bearish result of making it more expensive for holders of those currencies to buy crude.

Trading for the week ending March 10 was more typical of the trend year-to-date.

ANS rose \$1.17 March 10 to close at \$80.27, as WTI rose 96 cents to close at \$76.68 and Brent rose \$1.19 to close at \$82.78.

On March 9, ANS fell \$1.18 to close at \$79.10, while WTI fell 94 cents to close at \$75.72 and Brent fell \$1.07 to close at \$81.59.

## OPEC: China demand outlook raised

The Organization of the Petroleum Exporting Countries has revised higher

see OIL PRICES page 9



continued from page 1

WELL ADDITIONS

Pool” defined in AOGCC conservation order 701C. Both the Paxton and Pearl pads are being expanded to accommodate the new wells. Hilcorp received approval from the division to expand the Paxton pad last August; a Pearl pad expansion was approved earlier in March. In January, the most recent month for which AOGCC production data is available, Ninilchik was the most pro-

ductive of the Cook Inlet natural gas fields, accounting for 22.3% of natural gas production in that month. **Paxton wells** In a separate decision, on March 9, the division approved a Ninilchik unit plan of operations amendment for two grass roots wells at the Paxton pad. One of the wells, Paxton 12, was also included in the March 6 decision. This approval also includes the Paxton 13. The division said that in addition to drilling the project includes “installation of associated infrastructure

including gas flowlines, electrical instrumentation, well cellars, and conductors.” Drilling and testing for Paxton 12 will occur first. The division said the Paxton pad is some 4 miles northeast of Ninilchik on privately owned surface and subsurface. Hilcorp said the timeframe for drilling and construction activities at the Pearl and Paxton pads is expected to be March 10 to June 2. —KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

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OIL PRICES

its 2023 oil demand forecast for China, with jet/kerosene and gasoline leading demand growth, it said in its Monthly Oil Market Report released March 14. In 1Q 2023, China oil demand is set to see year-over-year growth of 0.5 million barrels per day, OPEC said. In 2Q 2023, oil demand is expected to increase year-over-year by 1.0 million bpd. “China’s reopening, following the lifting of the strict zero-COVID-19 policy, will add considerable momentum to global economic growth,” OPEC said. An even stronger-than-anticipated rebound in China is a possibility, it said. Domestic and international airline activity is expected to rise with increasing international business and tourism following removal of quarantines for international travelers arriving in China, OPEC said. Gasoline demand will improve significantly, driven by a strong rebound in mobility. China’s petrochemical industry is operating near full capacity of 99% in January, it said. Two new refineries — PetroChina’s Guangdong

U.S. commercial crude oil inventories for the week ending March 10 expanded by 1.6 million barrels from the previous week to 480.1 million barrels, 7% above the five-year average for the time of year, the U.S. Energy information Administration said in its March 15 report.

Petrochemical and Jiangsu Shenghong Petrochemical — are expected to enter commercial operation in coming months boosting feedstock demand for light distillates, OPEC said. Economic stimulus, along with infrastructure expansion in 2023, will spark a robust diesel consumption recovery, it said. China’s rebound is supported by a recently announced government targeted growth rate of 5%, among other economic measures, OPEC said, adding that a significant lift will come from the services sectors with a recovery in contact-intensive areas of the economy, including leisure, travel and tourism, and hospitality. Contribution from exports will be an important factor,

but exports are being impacted by a global slowdown, especially in the two important trading partner economies of the U.S. and the Euro-zone, it said. “Political tensions and trade-related issues seem to be on the rise with increasing trade barriers from G7 economies towards China,” OPEC said, adding that exports are expected to continue contracting in the first half of 2023 after a decline in fourth quarter 2022, but are forecast to pick up from the second half of 2023 onwards. Growth in China’s crude demand is potentially bullish for the pricing of ANS crude. Traditionally, rising crude oil purchases from Asia have diverted Pacific cargoes away from U.S. West Coast markets where the majority of North Slope oil is sold, resulting in a boost for ANS prices. Recently, due to Western sanctions and price caps on Russian oil put in place as a result of Russia’s invasion of Ukraine, China and India have snapped up supplies of cheaper crude from Russia, but Russia’s ability to supply China’s growing appetite for oil is uncertain. ●

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## BOUNDARY CASE

of language in PLO 2214 describing ANWR’s northwestern boundary as ‘the mean high water mark of the extreme west bank of the Canning River,’” the court said, language which originated with the USFWS in the 1957 land withdrawal for ANWR.

### Language issue

The state maintains that the language establishes the ANWR boundary as the western bank of the Canning River, while federal defendants maintain that the 1957 withdrawal application language and PLO 2214 language, “the westernmost distributary of the Canning River,” actually refer to the Staines River, the court said.

The March 9 decision and remand comes after the state moved to supplement the administrative record with 20 U.S. Geological Survey topographic maps dated 1951.

“For reasons left untold,” Gleason said in her ruling, “the State did not present the 1951 Maps to the IBLA during the underlying proceedings, so the IBLA did not review them and they did not become part of the Administrative Record designated in this case.”

The federal defendants’ primary evidence is a metes and bounds description and accompanying map prepared by USFWS in 1957 and a “nearly identical description of the boundary” in the 1957 Withdrawal Application and the official legal description of the boundary in PLO 2214, the court said.

IBLA reviewed and cited in its decision three USGS quadrangle maps submitted by the state which contain the year 1955. “Despite the 1955 marking, neither party identifies when, exactly, the USGS finalized and published these maps,” the court said, with the state claiming they are

based on aerial photographs taken in 1955 but not published until later.

The court said the issue of the year is critical, because the state maintains “that no government entity had physically surveyed ANWR’s proposed boundary by 1957 when USFWS drafted the metes and bounds description adopted in the 1957 Withdrawal Application and PLO 2214.”

### 1951 maps

The state argues the court must look to USGS quadrangle maps published before 1957 and has moved to supplement the record with 20 USGS topographic maps dated 1951.

The court said while it is unclear why the state failed to present the 1951 maps to the IBLA, it did properly raise “the general argument those maps support during the administrative proceedings.”

“That argument, to be clear, is that the documents available to USFWS when it drafted the legal description of ANWR in the 1957 Withdrawal Application showed that the Canning and Staines Rivers were distinct hydrologic features,” the court said. “Before the IBLA, the State called into question the topographic maps BLM used to support its determination of ANWR’s boundaries, characterizing them as ‘not field-checked.’”

The court said while the state is seeking to present new evidence, it is not seeking to raise new arguments.

There is no indication, the court said, that the state was aware of the importance of the 1951 maps during the IBLA proceedings. “To the contrary, the State raised concerns regarding the use of non-field-checked topographic maps during the IBLA proceedings, and then the IBLA issued a decision that heavily relied on the 1955 Maps.”

### Map updating issues

The court said the state “strongly suggests” that the

1951 maps were used in drafting the ANWR boundary legal description in PLO 2214, and presented a declaration from the Alaska Department of Natural Resources’ Division of Mining, Land and Water’s chief surveyor, who said “the 1955 Maps are an updated version of the 1951 Maps but ‘had not been published in 1957,’ meaning that ‘the update was in the process of being compiled in 1957 or that work on an update began after 1957.’” Thus, in 1957, the update was in the process of being compiled or work began after 1957, so in 1957 “the available USGS 1:250,000 quadrangle maps were” the 1951 maps, the court said.

The IBLA, however, relied on the 1955 maps in determining the drafters’ intent, which the state believes creates a gap in the administrative record, the court said.

The court said there is an inclination to supplement administrative records when “the proffered documents are relevant” and help the court “evaluate whether the agency considered all the relevant factors.”

The court said it “finds that the IBLA should consider and address the 1951 Maps in determining ANWR’s boundary.”

It grants the state’s motion to supplement the administrative record and remands “the matter to the IBLA to undertake a reasoned inquiry into how, if at all, the 1951 Maps affect its analysis and decision.”

The court said it will retain jurisdiction during the remand and said if the state seeks to proceed with its administrative appeal after reviewing IBLA’s decision on remand, the parties are to meet and file a proposed scheduling order setting out deadlines for their merits briefs.

—KRISTEN NELSON

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## GEOTHERMAL POTENTIAL

there is also the possibility of using the electricity for the manufacture of a variety of goods and foodstuffs, Karl said. He cited the example of Iceland, where a geothermal power smelting facility viably manufactures aluminum from bauxite shipped all of the way from Australia.

And with Unalaska being close to a major shipping route, the island and its Port of Dutch Harbor could become the fueling station of the future, Karl said. He said that OCCP’s geophysicist has estimated that a Makushin geothermal system could produce 450 megawatts of power for 500 years from its current acreage. He commented that, as a starting point, the company plans to place 40 acres of greenhouses adjacent the power plant, with the potential for producing large amounts of food.

### Power purchase agreement

OCCP has already signed a 30-year power purchase agreement with the City of Unalaska electricity utility. The company also anticipates supplying power to fish processing plants on the island, to replace the existing diesel generators. The shutting down of diesel generators would eliminate the emission of nitrogen oxides, particulates and carbon dioxide.

Another objective is to enable Unalaska residents to use heat pumps in their homes — OCCP has already conducted

a study into this concept. Heat pumps, using geothermal generated electricity, would be an energy efficient means of heating buildings that would eliminate the need to burn fuel oil or diesel fuel.

And whereas there is significant price volatility associated with diesel fueled power generation, the pricing of geothermal energy remains stable over a long period of time — much of the pricing involves the long-term amortization of the initial construction costs.

OCCP also envisages the possibility of using its cash flow to construct a small green hydrogen plant on Unalaska. There could then be the opportunity to use the hydrogen in conjunction with fuel cells to power fishing boats operating from the island, Karl suggested.

And once the initial power station is in operation, OCCP will look at the potential for expanding the system, Karl said. Beyond that, there is the potential to develop geothermal systems on Akutan and Adak islands, he said.

### The project plan

The current project involves placing a geothermal power plant on a plateau on a flank of the Makushin Volcano facing the city. OCCP anticipates using two to three production wells to deliver hot geothermal water into the power plant. Cooled geothermal water that has passed through the plant will be pumped back underground through injection wells for reheating. A 14-mile transmission line will connect the power plant to the city’s power grid. Ounalashka Corp., as the local Native village corporation, owns the land and sub-

surface rights in the area of the project. From previous exploratory drilling there is a known major source of hot geothermal water underground at the project site.

Karl said that at this point OCCP has obtained all of the required permits for the project and has constructed a required 2.4-mile utility corridor. The company is working with the Department of Energy for the remainder of the project funding and anticipates completing an access right of way to the project site this year. The company recently formed an agreement with geothermal company Ormat Technologies Inc. for Ormat to build the geothermal power plant.

Karl also said that the plan is to move a drilling rig belonging to Chena Power to Unalaska by the end of this year. The concept is to conduct drilling at the geothermal site in 2024, to meet the schedule for the power purchase agreement with the city utility. American Drilling, based in Kenai, will conduct drilling for the project. OCCP anticipates about 140 people working at the geothermal site during the peak of construction. The drilling will require a crew of about 20 people.

Overall, the implementation of geothermal power on Unalaska will achieve the three required pillars of a sustainable community: economic security, ecological integrity and social wellbeing, Karl said.

—ALAN BAILEY

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continued from page 1

## WILLOW APPROVAL

National Petroleum Reserve-Alaska, site of the Willow project, with a map showing the acreage as immediately north and south of the Bear Tooth unit. Interior said the relinquished leases reduce Bear Tooth's footprint by one-third.

On March 14, lawsuits were filed in opposition to the project.

### Arctic Ocean closed

As a runup to the Willow announcement, Interior said March 12 that President Biden, with authority under the Outer Continental Shelf Lands Act, "is withdrawing approximately 2.8 million acres of the Beaufort Sea" from future oil and gas leasing, completing protections for the entire Beaufort Sea Planning Area, and building upon President Obama's 2016 withdrawal of the Chukchi Sea Planning Area and the majority of the Beaufort Sea.

Interior also said it is initiating rule-making for ecologically sensitive areas in NPR-A and will consider additional protections for more than 13 million acres designated as special areas, with future oil and gas leasing and industrial development to be limited in the Teshekpuk Lake, Utukok Uplands, Colville River, Kasegaluk Lagoon and Peard Bay special areas.

### The shape of Willow

Interior issued its record of decision for Willow March 13, denying two of the five drill sites proposed by ConocoPhillips and removing an option, in preferred alternative E in the final supplemental environmental impact statement for the project released Feb. 1, which would have allowed consideration of a fourth drill site.

ConocoPhillips relinquished 68,000 acres of leases, which Interior said will create an additional buffer near calving grounds and migratory routes for the Teshekpuk Lake caribou herd.

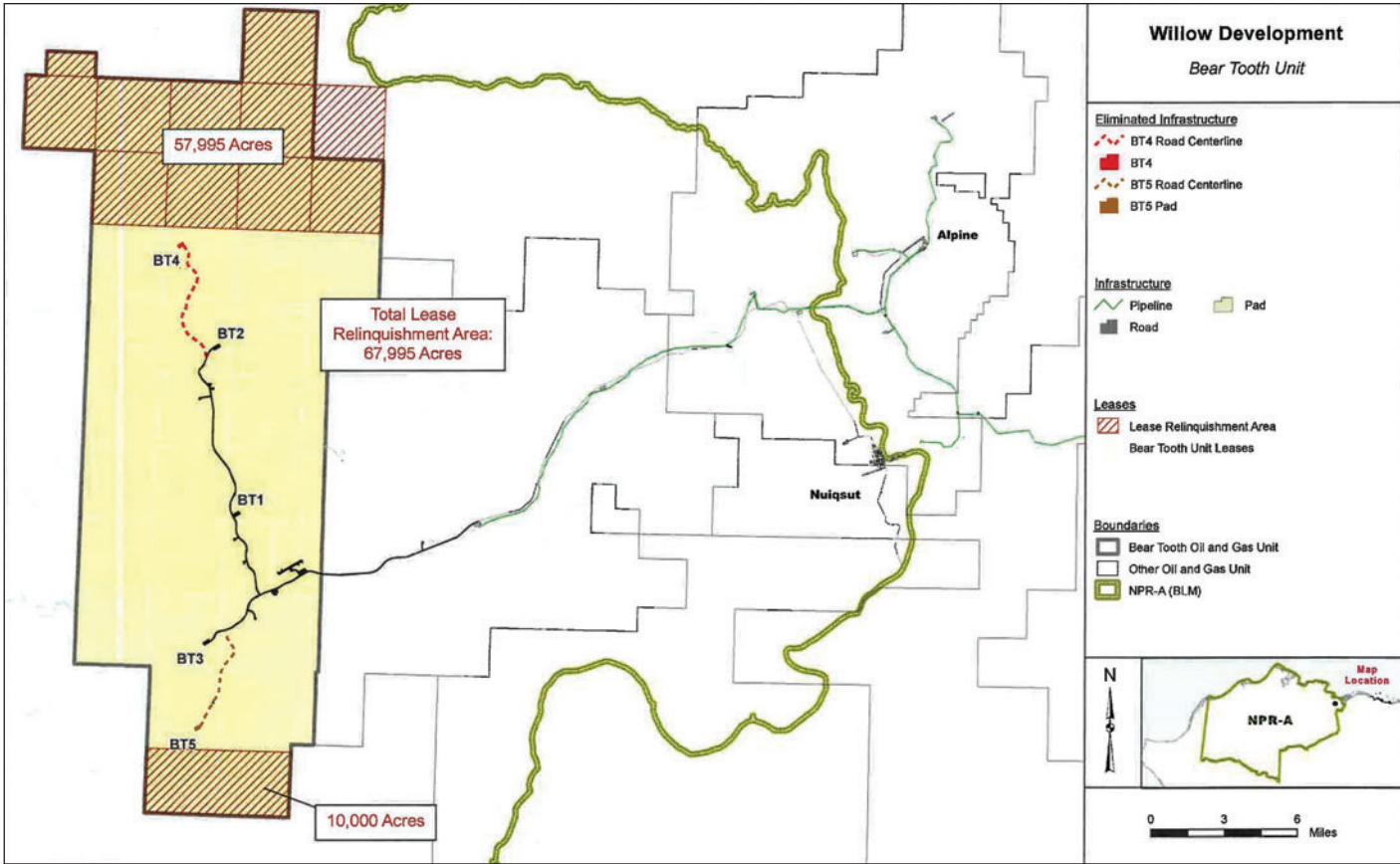
ConocoPhillips said in a March 13 statement that it has "completed extensive preparations with key contractors and expects to immediately initiate gravel road construction activities." It also said it "continues to review the ROD and will advance internal approval processes towards a Final Investment Decision."

Peak production is estimated at 180,000 barrels per day and the project is expected to create 2,500 construction jobs and an estimated 300 long-term jobs.

"This was the right decision for Alaska and our nation," said Ryan Lance, ConocoPhillips chairman and CEO. "Willow fits within the Biden Administration's priorities on environmental and social justice, facilitating the energy transition and enhancing our energy security all while creating good union jobs and providing benefits to Alaska Native communities."

### Cheering the project on

A joint statement from the Inupiat Community of the North Slope, North Slope Borough and Arctic Slope Regional Corp. said: "The elected regional Inupiat leadership of the North Slope would like to thank the Biden administration for its leadership on Alaska's Willow Project. ... As the ROD recognizes, for the North Slope, the Willow Project represents a new opportunity to ensure our indigenous, Alaska Native communities' ten thousand years of history has a viable future." The statement noted the project is expected to generate \$1.25 billion for the North Slope Borough and \$2.5 billion to the NPR-A Impact Mitigation Grant Program, "funding that will provide basic services like education, fire protection, law enforcement, subsis-



tence wildlife research, and more."

Alaska's congressional delegation welcomed the decision to approve Willow, which it has strongly supported.

"This was Alaska at its very best, with ConocoPhillips, Alaska Native leaders, labor leaders, our unanimous State Legislature, and so many more joining with the delegation to do everything we could to make this happen," said Sen. Lisa Murkowski.

Sen. Dan Sullivan said that in addition to being important for Alaska, "This decision is also crucial for our national security and environment. Producing much-needed American energy in Alaska with the world's highest environmental standards and lowest emissions enhances the global environment."

Sullivan said that with the ROD issued, "we are prepared to defend this decision. ... We will do so by working closely with the same Alaska stakeholders who brought as this far."

"Today, the people of Alaska were heard," said Rep. Mary Peltola. "After years of consistent, determined advocacy for this project, from people all across the state and from every walk of life, the Willow Project is finally moving forward."

Alaska Gov. Mike Dunleavy noted the jobs and oil the project is expected to produce, and the generation of at least \$8 billion in revenue for federal, state and local

governments.

Commenting on the Biden administration's announcement that it intends to prohibit oil and gas development on nearly 16 million acres, while Willow will have a footprint of some 500 acres, Dunleavy said: "It's disgraceful that the Biden administration thinks that this is a compromise that will benefit America." He said taking Alaska production off the table "will just shift the market and give leverage to producers in countries that don't have our high standards for the environment and human rights."

### The lawsuits

Two lawsuits were filed March 14

against the ROD.

The first was filed by Trustees for Alaska on behalf of Sovereign Inupiat for a Living Arctic, Alaska Wilderness League, Environment American, Northern Alaska Environmental Center, Sierra Club and the Wilderness Society against BLM, U.S. Fish and Wildlife Service and Interior.

A second suit was filed by Earthjustice and the Natural Resources Defense Council on behalf of Defenders of Wildlife and other conservation groups.

Both seek to block Willow. ●

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