### PAME II-2018: Agenda 7.4

### Articles on Arctic Offshore Oil and Gas Activities for the past year (October 17 to September 18) Greenland, Norway, Faroe Islands, Russia, Canada, Iceland, and

the US

For Information

## Greenland

Round:	Open Door Offshore
Status:	Open
Dates:	Opened 1 September 2014
Round:	The Davis Strait 2018 licensing round
Status:	Open
Dates:	Opened 1 January 2018, Closes 15 December 2018

# Amid flagging interest in oil, Greenland sticks to its lease sale plan

By Kevin McGwin, Arctic Now December 20, 2017

A Cairn Energy vessel in Greenland during the 2010 exploration season. At the time, the firm's initial promising results led many to believe a discovery was imminent. (Cairn Energy)

Greenland will go ahead with a planned sale of oil leases in 2018, despite not receiving a single bid in an auction that concluded on December 15, that country's oil officials said on Monday.

The next sale, covering the Davis Strait, between Greenland and Baffin Island, will be the last of five auctions called for in the <u>2014-2018 national oil and</u> <u>minerals strategy</u>.

The Department of Mineral Resources indicated that it did not expect interest in exploring for oil in Greenland to improve measurably by the time the 2018 sale begins, but failing to hold the sale, it worries, will cast doubt on future licensing rounds and "pose an investment risk."

The department blamed the situation on "the global recession within the exploration industry" and an oil price that is half what it was when the strategy was published in 2014.

"The absences of interest in this year's licensing round best can be observed as an expression for restraint within the industry, which particularly hits hard in the exploration sector when the revenues are low," a department statement said.

Oil has rallied in recent months, and is now at its highest price since the 2014 crash. But even with the improvement, and <u>the announcement that Norway's</u> <u>Statoil would invest \$6 billion to develop its Johan Castberg field</u> in the Barents Sea, <u>interest in exploring in the Arctic remains tempered</u>.

In Greenland, this has exacerbated a situation that has seen optimism about the possibility of finding oil dissipate rapidly after reaching a high-point in 2010 and 2011.

At that time, promising results from a \$1 billion drilling program undertaken by Cairn Energy, a UK-based explorer, sparked widespread optimism in Greenland that an oil strike was imminent.

Cairn, however, sat out the 2012 season, reportedly to review the data it had gathered during the two previous summers. It never resumed exploring, and earlier this year handed back its three licenses.

Today, the remaining four licenses made available between 2002 and 2011 are also in the process of being surrendered to the Self-Rule Authority. Western

Greenland is said to be sitting on 17 billion barrels of recoverable oil, but the firms handing back their licenses cited the high cost of operating in Greenland, as well as the low price of oil, as their reason for doing so.

On the eastern coast, where there is an estimated 32 billion barrels of recoverable oil, the outlook is somewhat better. There, all five offshore licenses and both on-shore licenses remain in the hands of exploration companies that include BP, Chevron and Statoil.

Greenlandic officials have in the past indicated that while they were optimistic about the prospects on the eastern coast, they viewed exploration there to be a long-range project.

## **Greenland Will Offer Oil, Gas Concessions** Next Year

#### Reuters

Tuesday, October 31, 2017 - 8:57am

Greenland will offer oil and gas concessions off its west coast next year, its mineral resources minister said in an interview Oct. 31, as the self-ruled region of Denmark tries to get a flagging exploration program back on track.

The concessions will be in Davis Strait and Baffin Bay, said Mute Bourup Egede, speaking to Reuters during an annual Greenland Day event at the Danish embassy in Beijing. Both bodies of water are between Greenland and Canada.

Egede put the estimated resources off Greenland's west coast at about 17 billion barrels of oil equivalent (Bboe), with another 32 Bboe on the east coast. It is unclear whether the resources are mostly oil or gas, he said.

Despite the vast potential, progress on exploration in Greenland has been slow, not helped by a plunge in oil prices that began in mid-2014 and has left benchmark crudes still at about 50% of their values of three years ago.

Norway's Statoil was one of several firms to cut exposure to Greenland when it announced in January 2015 that it was handing back three exploration blocks to the government.

The 2018 licensing round will be open to all and "we'll choose the best" bidders, Egede said.

Greenland is part of Denmark with self-government over domestic affairs. Copenhagen handles defense and foreign policy.

Greenland's minister for industry, labor, energy and trade, Hans Enoksen, earlier Oct. 31 told a media briefing at the embassy there were no plans to offer additional oil and gas licenses, as the country focuses on renewable energy instead.

It was not immediately clear why the two ministers appeared to give conflicting information. A press officer at the embassy was not immediately able to provide clarification.

Egede declined to give an update on the Kvanefjeld rare earth project, led by Greenland Minerals and Energy, since this was pending approvals. Kvanefjeld also holds substantial uranium reserves, although Egede said his party, Inuit Ataqatigiit, opposes uranium extraction.

Greenland's sole producing mine is a ruby mine operated by LNS Greenland that started up in May.

Next year, Hudson Resource's anorthosite project will begin production, and Greenland has signed a memorandum of understanding with Australia's Ironbark Zinc on an exploitation licence for the Citronen zinc-lead project in the far north, said Egede.

"If everything goes well it will be our third mine in two-four years," said Egede, who will meet both Ironbark and China Nonferrous Metal Mining Group, which Ironbark is trying to bring in as an investor, while in Beijing.

## Less is more – North West Europe's 'lesser' bid rounds

Andrew Rodda **Drillinginfo** 

If ever less was more, then it would be in Greenland. Over 100,000 sq km is available in the 2018 Davis Strait round. But Greenland made similar offers for 85,000 sq km in Baffin Bay and 13,000 sq km onshore Disko-Nuussuaq in 2017 and 2016 respectively but receive no bids. Currently Western Greenland is effectively unlicensed for E&P although an out of round application for 10,000 sq km offshore Southwest Greenland is currently being reviewed.



Figure 3 - Greenland Davis Strait round

Nunatsiaq NEWS: Around the Arctic January 13, 2017 - 10:00 am

# ICC-Greenland worries about potential oil-gas activity in Baffin Bay

"The hunters from both sides of the Baffin Bay are deeply sceptical towards this development"



#### JIM BELL

This map, published by Greenland's mineral authority in 2014, shows the blocks of offshore territory that have been or will be made available for oil and gas exploration. (GREENLAND MINERALS AUTHORITY)

The Inuit Circumpolar Council's Greenland wing is "immensely worried" about the prospect of oil and gas exploration in Baffin Bay, the organization said in a New Year's message shared with *Nunatsiaq News*.

And the ICC said it has found those worries are shared on both sides of the Greenland-Canada boundary.

"The hunters from both sides of the Baffin Bay are deeply sceptical towards this development. Other ICC regions together with ICC Greenland are immensely worried about offshore activities," Hjalmar Dahl, the president of ICC-Greenland, said in the message.

Last December, Dahl conveyed the same thoughts to Greenland's mineral authority, which is assessing the potential environmental impact of oil and gas exploration in Baffin Bay, off northwest Greenland.

And, in a Dec. 20 communication to the Greenland government, Dahl said it's an issue of concern to Inuit who live on the Canada side of Baffin Bay.

"The reason for that being that sufficient knowledge and data regarding the extent and the quantity of the supply of mammals from this marine area are non-existing, even though it is explicit knowledge that the area has an invaluable importance both here in Greenland and on the other side of the Baffin Bay in Canada," Dahl said in an English translation of his remarks.

Dahl pointed to the commission that the ICC set up to look at the status of the 85,000square-kilometre North Water Polynya, or Pikialasorsuaq, an ecologically rich zone of open water at the northern end of Baffin Bay between Greenland and Ellesmere Island that feeds numerous marine mammals and birds within its unusually warm microclimate.

This past September, the ICC commission, headed by two former government leaders, Eva Aariak of Nunavut and Kuupik Kleist of Greenland, <u>recommended the area be</u> managed jointly by Inuit on either side of the Canada-Greenland boundary.

"Most emphatically, Inuit want to build a caretaking regime for the polynya together as Inuit living, though divided by country, from one sea," Kuupik Kleist said last year.

In the same vein, Dahl told the Greenland government that any serious incident in the area could have international implications.

"In the case of this area of the [Baffin] Bay close to their native soil being polluted, this will not only have consequences for the Greenlandic part of the Bay area, but in the same way for the Canadian [Baffin] Bay areas, where our kinsmen are living and have their home," Dahl said.

For that and other reasons, ICC Greenland said they support the bans on offshore Arctic oil and gas licencing recently announced by U.S. President Barack Obama and Canadian Prime Minister Justin Trudeau.

These kinds of positions stand in contrast to remarks that Vittus Qujaukitsoq, Greenland's minister of economic development, made in Quebec City this past December.

In a blunt speech, Qujaukitsoq criticized the Obama administration and its chairmanship of the Arctic Council for "focusing perhaps too much on the policies of the past" and for working to stop oil and gas development.

The Greenland minister said Dec. 12 <u>his government welcomes Donald Trump's pro-oil</u> <u>administration</u> and in an oblique reference to Rex Tillerson, whose nomination was imminent that day, he said he welcomed the ExxonMobil tycoon's appointment to the post of United States Secretary of State.

And he said Greenland wants the rapid development of oil, gas and minerals to finance its future independence from Denmark.

For his part, Dahl said that although ICC-Greenland is sceptical of oil and gas development in Baffin Bay, they support economic development in general.

But he also said decisions about development must involve the citizens who are most likely to be affected.

"Regardless of which political initiatives may be taken, the most fundamentally decisive to ICC Greenland is that the decision processes are being completed under observance of democratic principles," he said.

However, it appears as if people on either side of the Greenland-Nunavut boundary may not see much oil and gas activity for a long time to come.

This past Dec. 28, the English-language Arctic Journal, based in Nuuk, published an English translation of an article that first appeared in the Greenlandic-Danish newspaper Sermitsiaq, reporting that <u>no firms have responded to a recent call for bids to explore for oil off the west coast of Greenland.</u>

And the same story reported that other firms are allowing existing permits to expire.

"On December 31, all nine of the current offshore licences to explore for oil and gas in Baffin Bay, near Disko Island and in the waters off Nuuk, are set to expire, and it is looking increasingly unlikely the firms holding them will move to renew them," the Arctic Journal story reported.

## NORWAY

## Well drilling confirms major oil discovery in Barents Sea

The appraisal well drilled by company Lundin at the Alta structure is an important step towards another major field development in the northern Norwegian waters.

By Atle Staalesen September 25, 2018 Barents Observer

«We are pleased to announce that we have successfully completed the Alta appraisal well,» <u>Lundin Petroluem informs</u> as results confirm significant oil resources in the Alta discovery.

Lundin made the discovery in 2014 and has since drilled nine exploration wells in the license area. Before this year's operation, the company estimated the size of the discovery to between 115-390 million barrels of oil. The results from the new appraisal well are expected to increase that resource estimate and reduce the uncertainty range, Lundin says.

The Alta is now believed to be significantly bigger than the «Goliat», the nearby field operated by Eni.

The drilling operation included a 700 meters horizontal appraisal well, as well as production testing. The test revealed good and very good reservoir properties and production rate without significant breakthrough of water or gas, the Norwegian Petroleum Directorate <u>says in a press release</u>. The operations was made with semi-submersible rig "*Leiv Eiriksson*".

The well was drilled about four kilometers south-southwest of the Alta discovery well, and 190 kilometers northwest of Hammerfest.

With the additional information about the license, Lundin is making steps towards a commercial development of the field.

## Norway grants drilling rights closer to protected Arctic waters

18 June 2018 Atle Staalesen, The Independent Barents Observer



A platform ready for drilling in the Norwegian Arctic. (Atle Staalesen/The Independent Barents Observer)

Norway issues several new oil licenses north of the 74th parallel.

"The opening of new exploration acreage is a precondition for reaching the targets in our petroleum policy", Norwegian Minister of Petroleum and Energy Terje Søviknes explained as he on Monday announced the new Arctic offer to the oil industry.

Of the nine new licenses issued in the Barents Sea, three stretch north of the 24th parallel. They include a total of six blocks. Another 27 blocks are located on the 73rd parallel.

It is all part of the country's 24th license round and includes the biggest opening of acreage this far north ever.

The oil companies will now be allowed to drill closer than ever before to the protected Svalbard zone, as well as the nature reserve of the Bear Island.

Several companies involved

It is AkerBP that gets most of the new northernmost blocks. The company holds the operator responsibility in two of the three licenses and is owner of a 40 percent minority stake in the third.

The other companies with license stakes in the area are Equinor (former Statoil), Lundin, OMV, Spirit, DEA, Wintershall and Petoro.

The Norwegian Petroleum Directorate believes that the 24th license round could offer major new discoveries.

"Our analysis shows that the biggest undiscovered resource potential on the Norwegian shelf is in the Barents Sea [and] we believe that this is the area where big discoveries are most likely", says Director Exploration Torgeir Stordal.

<u>Click here to view the Norwegian government's maps of the 24th licensing round in the Norwegian</u> <u>Sea and Barents Sea.</u> An environmental threat, eco-groups say

The new licenses are not well received by the environmental organizations.

According to Silje Ask Lundberg, leader of Friends of the Earth Norway, the 24th license round is a violation of the government's obligation to save vulnerable areas.

"The oil policy of the government is a catastrophe for the climate and our valuable ocean areas", she says in a announcement.

The environmentalists argue that the Norwegian Polar Institute and the country's Environmental Agency have warned against opening many of the new blocks and that consequences for sea birds in the area could be grave.

"This license round should never have been held, [...] the drilling will be a major threat to sea birds and the nature in the High North", Ask Lundberg underlines.

## 24th licensing round - announcement

22.06.2017

# Today, 21 June 2017, the Ministry of Petroleum and Energy (MPE) announced the 24th licensing round. In this round, 102 blocks/parts of blocks will be announced, divided among 9 in the Norwegian Sea and 93 in the Barents Sea.

"The Norwegian Petroleum Directorate's analyses show that the greatest undiscovered resource potential on the Norwegian shelf is in the Barents Sea. It is therefore important to facilitate acreage for petroleum activities in this sea area," says Sissel Eriksen, exploration director.

"The interest there is substantial, which is reflected by the fact that 2017 will be a recordyear with regard to exploration wells drilled in the Barents Sea. Several of these will also be significant for the blocks now being announced in the 24<sup>th</sup> round," says Eriksen.

In addition to the many exciting areas in the Barents Sea, several attractive areas in the Norwegian Sea will also be announced in this round.

"This licensing round will contribute to maintaining a high activity level and we look forward to the results in the years to come."

The application deadline is set at 30 November 2017 at 12:00. Leading up to the application deadline, the NPD will map the announced blocks in detail to obtain a better overview of the geology.

The Government aims to award new production licences in the first half of 2018.

## **12 Production Licences Offered to 11 Companies in the 24th Licensing Round**

18.06.2018

## Today, 18 June, the Ministry of Petroleum and Energy offers 12 new production licences to 11 companies in the 24 th licensing round.

Three licences are in the Norwegian Sea and nine licences are offered in the Barents Sea.

"I am pleased to see that we are now offering exploration acreage in the Norwegian Sea in a numbered licensing round. Two of the new licences are located in deep water, in the western part of the Norwegian Sea. It is encouraging that the industry wants to explore these frontier areas of the shelf," says Director Exploration Torgeir Stordal.

Stordal also finds the interest in acreage in in the eastern part of the Norwegian Sea positive; "If discoveries are made, this area can contribute important additional resources to the existing infrastructure".

Nine production licences are being offered in the Barents Sea. These are in geological provinces that have been subject to less exploration until now. Two of the new licences are additional acreage to existing production licences.

"Our analyses show that the largest undiscovered resource potential on the Norwegian Continental Shelf is in the Barents Sea. We also believe that this is the area on the Shelf most likely to deliver large discoveries," says Stordal, who is pleased with the outcome of this round.

"Although no new areas have been opened for exploration, as was the case before the 23<sup>rd</sup> licensing round, more production licences are offered in the 24<sup>th</sup> round. This shows that the Norwegian Continental Shelf is attractive to the industry."

The 24<sup>th</sup> licensing round was announced 21 June last year. The Ministry of Petroleum and Energy announced 102 blocks/parts of blocks, of which 9 were in the Norwegian Sea and 93 in the Barents Sea. Nearly half of this acreage is now included in the offers issued today; all 9 blocks in the Norwegian Sea and 38 blocks in the Barents Sea.

*Exploration wells drilled will probably be between 8 and 10 both in the Norwegian Sea and in the Barents Sea.* 

In 2017, the NPD acquired 2D seismic on the Gardarbank High to improve data coverage. The work to process this data is ongoing, and the plan is to complete this during the autumn of 2018. In the spring of 2018, the NPD entered into a collaboration with the University of Tromsø/CAGE for acquisition of seismic in a limited area in the eastern parts of the Barents Sea north.

### The Norwegian Sea

### Dvalin

The development plan for Dvalin was approved in 2017. The field will be developed with a 4-slot subsea template tied back to the Heidrun facility. The recoverable reserves are estimated at about 18 billion Sm<sup>3</sup> of gas. Production is scheduled to start in the fourth quarter of 2020. DEA is the operator.

### Aasta Hansteen

The authorities approved the development plan for the Aasta Hansteen gas field in 2013. The field will be developed with a floating field centre (Spar platform) and two subsea templates with eight well slots. The recoverable reserves are estimated at approximately 55 billion Sm<sup>3</sup> of gas. The plan calls for production to start during the autumn of 2018. Equinor is the operator.

### Njord further development

The authorities approved the development plan for the Njord project in 2017. The field was shut down in 2016 due to structural problems with the Njord A platform. Njord A and the Njord B storage ship were towed to land for upgrades. The estimated remaining recoverable reserves are 5.1 million Sm<sup>3</sup> of oil, 13.2 billion Sm<sup>3</sup> of gas and 4.1 million tonnes of NGL. Production is scheduled to start in the fourth quarter of 2020. Equinor is the operator.

### Trestakk

The development plan for Trestakk was approved in 2017. The oil field will be developed with a subsea template with four well slots and a subsea template with one well slot. The field will be tied back to the Åsgard A ship. Recoverable reserves are estimated at 10.7 million Sm<sup>3</sup> of oil and 1.4 billion Sm<sup>3</sup> of gas. Planned production start is in the second quarter of 2019. Equinor is the operator.

### Bauge

The authorities approved the development plan for the Bauge oil field in 2017. The field will be developed with a subsea template tied back to Hyme and Njord. The recoverable reserves are estimated at 7.9 million Sm<sup>3</sup> of oil, 1 million tonnes of NGL and 1.9 billion Sm<sup>3</sup> of gas. Bauge is scheduled to start production in the fourth quarter of 2020. Equinor is the operator.

### Ærfugl

The development plan for the Ærfugl gas field was approved in 2018. The plan is to develop the field <u>in two phases</u> with a total of six subsea templates that will be tied back to a production ship on the Skarv field. Expected recoverable gas reserves are estimated at 44 million Sm<sup>3</sup> of oil equivalents (o.e.), of which about 85 per cent are gas. According to the plan, Phase 1 will start to produce in the fourth quarter of 2020, while Phase 2 will come in 2023. Aker BP is the operator.

### Fenja

The authorities approved the development plan for the Fenja oil and condensate field in 2018. The field will be developed with two subsea templates and six wells which will be tied back to Njord. Recoverable reserves are about 11 million Sm<sup>3</sup> of oil and 3.4 billion Sm<sup>3</sup> of gas. The plan calls for Fenja to commence production in 2021. VNG Norge is the operator.

### The Barents Sea

### Johan Castberg

The development plan for the Johan Castberg oil field was approved in 2018. The field will be developed with a production and storage ship (FPSO). Recoverable oil reserves are estimated at 88.7 million Sm<sup>3</sup>. Proven gas (29 Msm<sup>3</sup> o.e.) is not included in the reserve estimate because it is used as the drive mechanism. Equinor is the operator.

### Askeladd

The Askeladd gas deposit is included in the development plan for Snøhvit, which the authorities approved in 2002. Total reserves associated with the project are 20.7 billion Sm<sup>3</sup>. Askeladd is now being developed with two subsea templates, and three new production wells will be drilled that will be tied back to the existing pipeline to Melkøya. Equinor is the operator.

## Where the Arctic Oil Industry Is Booming

As Donald Trump seeks to open more U.S. Arctic waters to drilling, Norway is showing the way.

By Mikael Holter May 2, 2017, 7:00 PM AKDT

With the oil industry barely recovering from its most brutal slump in decades, you might expect the Arctic Ocean to be the last place explorers would hunt for new discoveries.

The Barents Sea off Norway's northern tip is different.

Norwegian authorities <u>expect</u> companies including <u>Lundin Petroleum AB</u> and <u>OMV</u> <u>AG</u>to drill a <u>record</u> 15 wells in the Barents this year. <u>Statoil ASA</u>'s Songa Enabler, a floating drilling machine the size of two football fields, is in the vanguard of those efforts as it embarks on a five-well exploration campaign.



The Barents enjoys a number of advantages over the U.S. Arctic, where President Donald Trump is pushing to expand drilling. Thanks to the Gulf Stream, it's largely ice-free, unlike other areas such as Alaska and Greenland, which have been deserted by oil companies like Royal Dutch Shell Plc since 2014. The relatively shallow waters off Norway mean drilling is less costly, while the potential prize is huge: the Enabler's fourth well will be Korpfjell, probably the largest prospect to be tested offshore Norway since the 1990s.

"It's the biggest remaining structure that we know of on the Norwegian shelf," Tim Dodson, head of exploration a state-controlled Statoil, said aboard the rig last week. "It's important for us, and for northern Norway — and the entire country, actually."

Norway is betting the under-explored Barents could boost its oil industry, after crude production fell by half since 2000. There could be more than 17 billion barrels of oil and gas yet to find here, or almost 65 percent of Norway's undiscovered resources, according to <u>estimates</u> from the Norwegian Petroleum Directorate.



### **Arctic Oil Hunt**

Explorers set to drill record amount of exploration wells in Norway's Barents Sea

In Hammerfest, the regional oil hub that bills itself as "the northernmost town in the world," the industry downturn since 2014 that prompted tens of thousands of job cuts along Norway's North Sea coast has gone largely unnoticed.

Encircled by snow-clad hills on a fjord south of the town center, Polarbase AS serves ships supplying the Songa Enabler and other rigs. When oil exploration in the Barents was halted for six years during the 1990s, Polarbase survived by selling snow scooters and farming salmon. This time is very different.

Exploration is booming and "we're now focused on oil and gas," said Ketil Holmgren, manager of Polarbase.



Workers aboard the Songa Enabler rig.

Photographer: Mikael Holter/Bloomberg

Statoil, Lundin and OMV have already made discoveries totaling more than a billion barrels in the Barents Sea since 2010, and Eni SpA last year started producing oil from Goliat, the area's first platform. Statoil plans to make a final investment decision on the Johan Castberg project this year after reducing costs by more than 50 percent.

Even with the Gulf Stream, which pumps warm water north across the Atlantic Ocean and cold water south, the Enabler rig is "winterized" and can withstand temperatures down to -25 degrees Celsius — complete with a heated emergency-exit path on deck. But apart from a few scattered snowflakes in the late-April air, there's little to suggest you're deep inside the Arctic Circle.

Korpfjell is high-risk — Dodson sees a one in six chance of making a find there — but its multi-billion barrel potential could also prove high-return. With a higher probability for Statoil's other targets, he expects to make at least one discovery.

With the basin bucking the <u>global downturn</u> in offshore exploration, the government has proposed a <u>record</u> number of Barents blocks in its next licensing round.

Despite industry optimism, Arctic drilling remains controversial in Norway, a country of 5.3 million people that became one of the world's richest after striking oil in the North Sea in the late 1960s.

Environmental groups such as Greenpeace and WWF say drilling rigs are going too close to the edge of the polar ice sheet — a <u>fragile ecosystem</u> that sustains species from plankton to mammals — posing catastrophic threats in case of a spill. A debate is also raging over whether oil and gas in the remote Barents can be profitable amid efforts to fight climate change that could cause demand for fossil fuels to plummet.



The Songa Offshore Enabler rig in the Barents Sea off the coast of northern Norway.

Photographer: Mikael Holter/Bloomberg

If Arctic projects don't pay off, that could mean billions of dollars of lost revenue for the Norwegian government, which offers generous refunds and deductions for exploration and investment in a trade-off for imposing a high tax rate on oil production.

"There's a very high probability that these investments will be stranded assets," said Jens Ulltveit-Moe, a Norwegian investor who made part of his \$400 million fortune in oil-related ventures, before selling them more than a decade ago.

Statoil and Norway's Petroleum and Energy Minister Terje Soviknes don't agree.



Norway's energy minister Terje Soviknes, center, Statoil's head of exploration Tim Dodson, right, and Jez Averty, Statoil's head of exploration for Norway and the U.K. stand aboard the Songa Enabler.

Photographer: Mikael Holter/Bloomberg

"With a break-even price of \$35 a barrel, we're competitive and then some," he said in an interview on board the Enabler, referring to Statoil's Castberg project. "That makes a lot of the stranded-assets debate disappear."

Statoil's Barents Sea wells are among the cheapest in its global exploration portfolio this year, at \$25 million apiece at most, Dodson said.

"It's a bit of a myth, to be quite honest, that things are so much more costly up here," he said.

That's good news for Hammerfest, where the oil industry has created 1,200 jobs since Statoil decided 15 years ago to build a liquefied natural gas plant to process production from the Snovhit deposit, the Barents Sea's first field. The town used to be a "run-down" place from which you moved away if you wanted to get ahead, said Polarbase's Holmgren, a 55-year-old native of Hammerfest. Now, "young people who leave have plans to come back."

## Norway doubles Arctic oil estimates

Studies of the northern part of the Barents Sea shows twice the resource potential per square kilometer as the southern Barents Sea.

By Thomas Nilsen April 25, 2017 Barents Observer

The area mapped for potential oil and gas is further north than anyone ever in the circumpolar Arctic has imagined to look for petroleum.

An area of 170,000 square kilometres from 74° to 77° north, east of Svalbard, might hold as much as 1.4 billion standard cubic meters of oil equivalents.

«This figure is naturally associated with some uncertainty. It could turn out to be lower or it could be much higher,» says Bente Nyland, Director of the Norwegian Petroleum Directorate. She presented the new findings at the Barents Sea conference in Hammerfest on Tuesday.

Including earlier estimates from the southern part of the Barents Sea, the total Barents petroleum resource estimate is now 2.8 billion standard cubic meters of oil equivalents.

"The expected total resources are about the same in the mapped part of the northern Barents Sea as in the southern Barents Sea, but the northern part is only half the size of the southern part," the Directorate says in a <u>press-release</u>.

### Barents Sea No. 1

The share of undiscovered resources in the Barents Sea has thus been increased from 50 to nearly 64 percent of the total undiscovered resources estimated to be on the Norwegian shelf. In others words; there are likely more undiscovered oil and gas in the Barents Sea than in the Norwegian sector of the North Sea and Norwegian Sea combined.

A large part of the new area is located in the previously disputed area. In 2010, Norway and Russia signed an agreement that placed the boundary and mapping for petroleum resources could start.



Since 2012, the Petroleum Directorate has mapped the new areas in the eastern and northern parts of the Barents Sea. The northernmost areas are not opened for oil drilling, but both Statoil and Rosneft are interested in the areas on both side of the border line.

EU and USA have both put sanctions on Russian Arctic offshore drilling. As a result, no European nor American oil companies can take part in oil exploration and production offshore anywhere north of the Arctic Circle on the Russian shelf.

In Norway, environmental groups have <u>filed a lawsuit against the state</u> over Arctic oil drilling. The groups argue that the state violate the Norwegian people's constitutional right to a healthy and safe environment. Barents Sea oil must remain in ground if Norway should fulfill its Paris climate deal obligations, the environmentalists claim.

### Exploration record

In a few weeks time, the drilling season starts in the Barents Sea. After two years without test-drilling, Statoil is now <u>making ready for five to seven drillings</u> and partner agreements are signed with ConocoPhillips, OMW, DEA and Point Resources. A test-well will also be drilled near the existing Goliat-field, where Statoil partners with ENI Norge.

The Petroleum Directorate is expecting a new record in the number of exploration wells in the Barents Sea this year.

Fifteen wells are slated for drilling, two more than in the record year 2014.

"This is a significant increase, and shows a very positive development in the Barents Sea," says Bente Nyland, talking to the audience at the Barents Sea Conference.

The northernmost drilling this year take place at Korpfjell further northeast in the Barents Sea.

The Directorate says the drilling is a «wildcat» and important since it is the first in the northeast area and considered an important part in the work in mapping the geology in this part of the Barents Sea.

"The well could confirm whether there is petroleum in the area, and will provide us with invaluable knowledge about the subsurface," says Director Nyland

## Faroe Islands

# Oil in the Faroe Islands: mirage or miracle ?

June 20, 2018 by Pierre-Henry Deshayes

There's got to be oil somewhere out there, the Faroese believe

After fuelling hopes of independence from Denmark at the turn of the millennium, the Faroe Islands' dreams of an oil bonanza have turned out to be more of a mirage than a miracle.

"We are confident that there is oil and gas here," Kristina Hafoss, finance minister in the Danish autonomous territory in the North Atlantic, told AFP.

Even if there's not a single oil platform in sight?

"It's just a question of getting enough companies to go out and search for it and then we will find it."

The oil majors lined up in the beginning.

In 2000, Britain's BP, Norway's Equinor (formerly known as Statoil) and Italy's Eni were among those who obtained licenses to prospect Faroese waters.

After nine test drills and much disappointment, the initial enthusiasm has now waned. Oil and gas was found in some wells, but the quantities were not enough to justify commercial production.

Equinor, the last of the oil companies to maintain an office on the Faroe Islands, shut its doors in 2015.

"We drilled a total of four exploration wells without making a commercial discovery, and based on the remaining potential we saw in the Faroe Islands the decision was made to exit," spokesman Erik Haaland said.

During the most recent licensing round last year, only one group showed interest but no license was ever awarded.

#### 'Positive indications'

The failure to find black gold could have extinguished the hopes of Faroese separatists, but the archipelago's economy is thriving thanks to profitable fisheries and fish farm sectors.

So much so that around half of the Faroe Islands' 50,000 inhabitants are toying with the idea of becoming independent from Denmark.

At the Faroese Geological Survey, experts are trying to make the most of the situation. "It was a disappointment, I won't pretend it wasn't but given the timing, I'm not that surprised," said marine geologist Heri Ziska, referring to the weak oil price which has forced the oil industry to slash investments over the past few years.

Nonetheless, "we have very positive indications from some <u>oil companies</u>," he said, adding: "We can see that they are working in the area, so they're looking actively at it."

Off the nearby Shetland Islands, significant oil and gas fields have been found. Anglo-Dutch group Shell and US group Chevron are set to develop the Combo and Rosebank fields respectively, located just on the other side of the Faroes' maritime border.

"When you know that just a few kilometres from the Faroese border the UK finds oil all the time, it's quite sure that there is oil here," insists Poul Michelsen, the Faroese foreign minister in charge of oil issues.

#### Vigorous offshore industry

In addition to their geographic remoteness, the Faroe Islands must also contend with the challenge of having a seabed made of basalt, an inhomogenous volcanic rock that complicates drilling and makes it more expensive.

Even though a major oil discovery has yet to be made, the Faroe Islands still have a flourishing oil sector.

With strong maritime traditions dating back to their Viking roots, more than 1,000 Faroese work in the offshore sector, either in the Faroes or elsewhere.

"That's one of the really big successes of oil exploration in the Faroes: we don't have oil production but we have a lot of income from oil," noted Ziska.

Regin Joensen is one of those who makes a living on oil rigs.

Employed by a Norwegian oil services company, he's the supervisor of an underwater remote operated vehicle off the Ivory Coast.

"Working on a Norwegian contract, the money (is) great and the 2-4 rotation as well. If I work in the North Sea I'm on board for two weeks and then home for four weeks. Working in Africa, the rotation is four weeks on and eight weeks off."

For 134.3 days worked a year, he earns a monthly salary of almost 6,000 euros (\$7,000), and he gets 935 euros for each additional day.

Aged 52, he can't imagine working in any other sector.

"You can't change the expensive habits you have developed over the years earning good offshore money."

Read more at: <u>https://phys.org/news/2018-06-oil-faroe-islands-mirage-miracle.html#jCp</u>

Drillinginfo

#### PAME (II)/18/7.4/Current Arctic Offshore Activities 2018 – Information document

The Faroe Islands 4th Exploration Round launched on 17 May 2017, with bidding closing on 17 February 2018. The round covered the Northwestern part of the Faroe-Shetland Basin to the South & Southeast of the Islands, and nearly 50,000 sq km was available. The Faroese government reports that only one application was received. Three licenses covering 6,500 sq km were awarded in the previous Third Round in 2007/8 but all three have since been relinquished, and there are no active Faroese licences. The regulator Jarðfeingi plans to offer further acreage to the Northeast, North and West of the islands in future rounds.



### Andrew Rodda

Andrew Rodda joined Drillinginfo in May 2014, as an E&P Analyst for North West Europe, currently a senior analyst providing insights and writing editorial content for UK, Norway, Netherlands, Denmark, Ireland, Faroe Islands, Iceland and Greenland. Prior to Drillinginfo, he was an Offshore Logging Geologist for Halliburton, based in Aberdeen, primarily working on rigs and platforms in the North Sea. He holds a Bsc Honors degree in Geology from Plymouth University.

### FOURTH LICENSING ROUND FINALLY CONCLUDED

#### 26/04/2018 | <u>News</u> |

The Fourth Faroese Licensing Round which closed on 17 February resulted in one application to explore for hydrocarbons in the Faroese sector.

After Jarðfeingi had processed the application and discussed it with the applicant the applicant took the decision to withdraw the application.

The Fourth Licensing Round has therefore ended without any licenses being issued. Jarðfeingi's assessment is that the principal reason for there not being more applications is that the oil and gas industry has not resumed previous levels of exploration activity again after the economic crisis which afflicted the industry in the wake of the dramatic fall in oil prices in 2014.

## Russia

# What are 5 Norwegian supply vessels doing in Russia's Kara Sea?

## The drilling of two wells in remote Arctic waters is basis for an international meeting of oilmen.

#### <u>Atle Staalesen</u> August 15, 2018 Barents Observer

When the Chinese rig «*Nanhai 8*» <u>set out from Murmansk on July 17th</u>, it was accompanied by a Norwegian ship. The «*Siem Emerald*» towed the drilling installation all the 800 sea miles through the Barents Sea and to the Kara Sea drill site. The 91 meter long offshore supply ship has since been in the area to provide services to the Chinese drill men.

It is the second year in a row that the semisubmersible «Nanhai 8» is in the Kara Sea. In 2017, it discovered significant natural gas volumes in the Leningradskoye field. This year, it is drilling a well at Rusanovsky, a nearby license area owned by Gazprom.



Chinese rig "Nanhai 8" towed by "Siem Emerald" out of the Kola Bay. Photo: Gazprom Geologorazvedka

Norwegian ships are also playing key roles in connection with the ongoing well drilling in the nearby Nyarmeysky license area. Drilling is conducted by semisubmersible rig *«Arkticheskaya»*, an installation owned and operated by Gazprom subsidiary Gazflot. It left Murmansk on 19th July and has since been in operation along coast of the Yamal Peninsula.

On site near the *«Arkticheskaya»* is the Norwegian supply ship *«Boa Bison»*, a vessel owned by company Boa, and the *«Norsea Fighter»*, a ship owned by Vestland Offshore. In the area are also the *«Sea Spear»* and *«Sea Supra»*, two supply ships owned and operated by Norwegian company Solstad Farstad ASA.

According to company Operations Director Bjørn-Inge Engene, *«Sea Spear»* and *«Sea Supra»* are engaged in supporting drilling activities at both the Rusanovsky and Nyarmeysky areas. The Kara Sea is ice-free at the moment and the ships will be on site until the end of the drilling, he says in a comment to the Barents Observer.

«We have operated in this area several times before and have gained solid experiences from ship management in this kind of remote areas,» he underlines

There has not been such a big number of Norwegian vessels in the Kara Sea <u>since</u> <u>2014 when ExxonMobil drilled its University-1 well in the area</u>. That drilling was

part of the U.S company's comprehensive cooperation with Rosneft, and results showed the discovery of many million tons of oil.

The well was drilled by Norwegian rig *«West Alpha»* and logistical operations were comprehensive. About **2,000** people were involved in the drilling operations and most of them were Norwegians.

The cooperation between ExxonMobil and Rosneft came to a halt after Russia's annexation of the Crimea and the subsequent introduction of western sanctions. The sanction regime prohibits key services necessary for deep water and arctic oil exploration and production. However, there is still a loophole for offshore supply services.

## Seismic vessels push Arctic limits

## Russian geological research ships are soon on their way to the Laptev Sea.

By Atle Staalesen August 08, 2018 Barents Observer

They are among the most remote and least explored waters on the Russian shelf. And the oil and gas potential is believed to be significant. The so-called Taimyr-Severozemelsky area includes the waters north of Taymyr Peninsula and the ones surrounding archipelago Severnaya Zemlya. Ice lies thick though major parts of the year and shipping is considered risky. Not few ships have got stuck as they try to break through the ice of the Vilkitsky Strait, the waters separating the Kara Sea and Laptev Sea.



The Laptev Sea

This is where state company Rosgeo now is getting ready to engage. The company recently signed a contract with a government agency on seismic surveying in a 40,000 square km area in the northwestern part of the Laptev Sea.

By the end of year 2020, Rosgeo is to conduct geophysical studies of the area, which subsequently will prepare the ground for further action.

As a result, a single array of geological and geophysical data will be formed and recommendations for further exploration will be developed, <u>the company informs</u>.

Hydrocarbon resources could be huge. Oil company Rosneft in 2017 drilled a well in the Khatanga Bay and said it believed the Laptev Sea <u>could hold as much as 9,5</u> <u>billion tons of geological reserves</u>.

In a meeting in the Kremlin in June 2017, Rosneft leader Sechin brought with him a drill core sample from the Tsentralno-Olginskaya-1, and expressed high expectations from future activities.

«We can inform you, Vladimir Vladimirovich, that we, based on preliminary analysis, are about to open a very serious field», <u>Sechin said as he handed the</u> <u>President the core sample</u>.

Also Rosneft is conducting comprehensive seismic mapping in the region. In 2017, the company mapped about 1 million square km of Arctic waters. That is about 25 percent of the Russian Arctic waters considers prospective, the company informs. The character of 130 perspective structures was identified and ten new objects discovered.

The company now has 11 structures which are up for well drilling, <u>Rosneft informs</u> <u>on its website</u>.

# Well drilling starts in shallow waters of Ob Bay

Natural gas company Novatek has spud its first ever offshore Arctic well on the spot where it intends to develop its third Arctic LNG project.

By Atle Staalesen July 31, 2018 Barents Observer

It is the 34-year old *«Amazon»*, a 6,570 ton installation owned by company Gazprom Flot, that this week started drilling on the Severo-Obskoye, a license area located in the northern part of the Gulf of Ob.

The resources discovered will serve as basis for the company's projected Arctic LNG 3.



Jackup rig "Amazon". Photo: flot.gazprom.ru

The operation is controversial. The license area is located close to the open waters of the Kara Sea, and Novatek is not among the companies allowed to operate on the Russian Arctic shelf. Currently, only Gazprom and Rosneft have that exclusive right.

Severo-Obskoye is situated about 125 km north of Sabetta, in the area where the Gulf of Ob runs into the Kara Sea. According to Russian legislation, these are «inland waters» and not shelf.

The area has a «significant geological potential» and a «favorable location with regard to logistics», <u>company CEO Leonid Mikhelson underlines in a statement.</u>

Novatek conducted large-scale dredging in the gulf ahead of its Yamal LNG. That will not be required in the Arctic LNG 3. Water depths are sufficient for easy access of large ships.

The project will be operated by floating gravitation-type production platforms built at the Kola Yard outside Murmansk.

«The start of exploration drilling is an important step in the development of our latest LNG project, the Arctic LNG 3, which will become a new milestone in Novatek's started to boost LNG production in the Russian Arctic,» Mikhelson says.

Planning has long been in the making. The *«Amazon»* was transported to the Gulf of <u>Ob</u>already in late 2017 and subsequently <u>spent the whole winter in Yamburg</u>, a port on the eastern banks of the gulf.



Blessing of "Amazon" oilmen ahead of drilling. Photo: Gazprom Flot

The jackup rig was first transported to Sabetta with a Chinese heavy loads ship and from there towed to Yamburg. It is not the first time that the "Amazon" is in the region. In the period 2002-2011, the rig successfully drilled 22 wells in the Kara Sea, <u>Gazprom Flot informs</u>.

Novatek has a number of license areas both in the Yamal Peninsula and nearby Gydan Peninsula. Among them is the South Tambey filed, on the bases of which the company runs the Yamal LNG and the Salmanovskoye, which will be the resources basis for the Arctic LNG 2.

# Drilling rigs are on their way to Russian icy waters

## Weeks after schedule, Gazprom is getting ready to drill two wells in the Kara Sea.

By Atle Staalesen July 25, 2018 Barents Observer

Semisubmersible «*Nanhai VIII*» on 17th July left the port of Murmansk with course for the Kara Sea. Two days later, the «*Arkticheskaya*» followed suit, <u>Gazprom Flot</u> <u>informs</u>.

The rigs will be towed 800 nautical miles to the fields of Rusanovskoye and Nyarmeyskoye, two license areas controlled by Gazprom.

By the 25th July, the *«Arkticheskaya»* had sailed south of the Kolguyev island and into the Pechora Sea. The *«Nanhai VIII»*, also known as the *«Nan Hai Ba Hao»*, had made it to the southern coast of archipelago Novaya Zemlya, near the entrance to the Kara Sea, data from ship tracking service MarineTraffic show.



The "Arkticheskaya" leaving Murmansk on the 19th July. Photo: Gazprom Flot

While the *«Arkticheskaya»* is towed by Russian supply ships *"Almaz"* and *"Umka"*, the *"Nanhai VIII"* is accompanied by Norwegian ship *"Siem Emerald"*.

Both rigs are long delayed. The towing operations from Murmansk were originally to take place several weeks ago, but complicated ice conditions in the Kara Sea have hampered progress.

The same complicated conditions have <u>created major challenges for the ships</u> <u>serving the terminals in the Gulf of Ob</u>, as well as for <u>the Prirazlomnaya oil platform</u>. On 25th July, major parts of the Kara Sea were still covered by ice. There is also ice in major areas in the Pechora Sea, data from the Russian Arctic and Antarctic Institute show.

<u>According to Gazprom Geologorazvedka</u>, a subsidiary of Gazprom, the «*Nanhai VIII*» and its tugboats will make a halt near Novaya Zemlya, from where they will be accompanied by icebreakers.

With the drilling at the Rusanovskoye and Nyarmeyskoye, Gazprom follows up its Kara Sea operations from 2017. Then, the same *«Nanhai VIII»* drilled at the nearby Leningradskoye field and <u>discovered resources equal to 1,9 trillion cubic meters of natural gas</u>.

This year, the «Nanhai VIII» arrived in Murmansk on 23rd of June.

The *«Arcticheskaya»*, however, has not engaged in Arctic waters in many years. The rig early this year underwent a series of repair works in Singapore before it in March was sent towards Murmansk. The Kara Sea drilling is embraced by big expectations and rig owner Gazprom Flot ahead of departure organised a church service on board, during which the crew was blessed by a local priest.



Church blessing ahead of Arctic drilling. Photo: Gazprom Flot

Gazprom this summer also intends to drill a well in the Gulf of Ob. The 6,570 ton heavy jackup rig «Amazon» <u>was in October 2017 transported to the shallow waters</u> <u>of the Ob Gulf</u>, whereupon Gazprom Flot started to build up a new crew. It has spent the whole winter in the remote port of Yamburg. The «Amazon» was originally to engage in drilling in the course of July this year, but also this operation is likely to have been postponed.

Russian companies have over the last years brought several rigs and drilling ships back to domestic waters. On 22nd March this year, <u>the Russian flag was again raised</u> <u>at «Valentin Shashin»</u>, the drillship that once found one of the biggest natural gas

fields in the Arctic, the Shtokman field. The ship will from now on have Murmansk as its home port and operate for company Arktikmorneftegazrazvedka (AMNRG), a subsidiary of state-owned Zarubezhneft.

At the same time, geological exploration company Rosgeo is upgrading its drilling ship «Bavenit» to make it «<u>one of the one of the best equipped geological</u> <u>exploration vessels in the world</u>.» The «Bavenit» will this summer be engaged in Russian Arctic waters, the company informed.

## **Rosneft delays Arctic offshore drilling**

Author<u>Nastassia Astrasheuskaya</u> 30 Mar 2018 | 04:57 UTC

Moscow

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Russia's top crude producer, Rosneft, is in talks with government authorities to delay work at its Arctic offshore projects as it has failed to drill some wells after Western sanctions blocked cooperation with international majors in the region, natural resources minister Sergei Donskoy said Friday.

\* May involve revision of the Kara Sea license: natural resources minister

\* Makes discovery in E. Siberia with BP

Rosneft "did not manage to drill some wells" at a number of licenses where previously granted extensions expire this year, Donskoy told reporters, referring to Russia's state subsoil agency.

"Rosnedra is considering their proposals now - to delay by another 1.5-two years," he said.

The ministry could not specify the projects under consideration for postponement. Rosneft did not respond to a comment request.

Rosneft as a state-run company is the owner of the bulk of licenses for Russian Arctic blocks, along with Gazprom.

The company initially invited a number of international majors to its projects in the Arctic, including ExxonMobil to the region's most promising Kara Sea project, where the two had successfully drilled a well, before ExxonMobil had to suspend further work on the project over sanctions introduced in 2014.

Rosneft later announced a major discovery from the well, and continued appraising the drilling results. Earlier this year, the US oil giant said it was withdrawing from the JVs with Rosneft in Russia over persisting sanctions, citing losses.

Donskoy did not rule out that Rosneft may seek a revision of the Kara Sea license as well, although no such request has been received so far, he said.

A number of licenses have been revised in 2015-2016 as companies following the companies' application to shift the timeframes for exploration, seismic and geological survey and production on at least 15 of them, the ministry's officials said at the time.

Specific potential projects for delays in the current round of revisions remain unclear as the bulk of drilling in the region has been scheduled to start no sooner than 2019.

The license for a joint project between Rosneft and Italy's Eni in the Barents Sea, for example, envisages the drilling of the first well by 2020.

"The key phase of exploration drilling in the region will fall between 2020 and 2022," as part of the plan to drill 80 exploration wells between 2016 and 2018, deputy energy minister Kirill Molodtsov wrote in a column in Rossiyskaya Gazeta state daily earlier this week.

Current oil prices do not stimulate work in the Arctic so far. Russia's energy minister Alexander Novak earlier estimated that offshore projects in the Arctic could become attractive at prices above \$80/b.

To encourage exploration in the region, the natural ministry urged the government to amend tax legislation to offer more tax incentives to the companies to stimulate further exploration in the Arctic, Donskoy said.

Russia has one producing Arctic offshore field so far, Gazprom Neft's Prirazlomnoye in the Pechora Sea. The field produced 2.64 million mt, or about 53,000 b/d, last year, according to the company.

### EAST SIBERIA DISCOVERY WITH BP

The drilling of the first well at Rosneft-BP joint venture in Siberia has been successful as the companies have registered a discovery of the the Baikalovsky field in the Krasnoyarsk region, Donskoy said. The companies are continue the appraisal of the reserves there, he said, adding no further details.

Yermak Neftegaz joint venture was established in 2016 and focuses on geological exploration in West Siberia and the Yenisey-Khatanga basin in East Siberia.

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--Edited by Richard Rubin, <u>newsdesk@spglobal.com</u>

# The drillship that discovered the Shtokman field returns to Arctic

After more than 20 years abroad, the «Valentin Shashin» will again have Murmansk as its home port.

By Atle Staalesen April 03, 2018 Barents Observer

As western sanctions continue to trouble Russian offshore oil exploration in the Arctic, domestically-built drillships are taken back home. On 22nd March, the Russian flag was raised at *«Valentin Shashin»*, the drillship that once found one of the biggest natural gas fields in the Arctic.

The move follows more than 20 years of drilling abroad, first in South America, then Africa and Southeast Asia. The ship will from now on have Murmansk as its home port and operate for company Arktikmorneftegazrazvedka (AMNRG), a subsidiary of state-owned Zarubezhneft.

It was in 1983 that the *«Valentin Shashin»* moved into the central part of the Barents Sea and started the drilling operation that soon revealed the 3,9 trillion cubic meters Shtokman field.

The drilling followed exploration works conducted by vessel *«Professor Shtokman»* in 1981.

The *«Valentin Shashin»* in the period 1982-1994 drilled 15 wells in Arctic waters and made several major discoveries, among them the Shtokman field, <u>owner</u> <u>Zarubezhneft informs</u>.

The Shtokman remains one of the biggest offshore natural gas fields in the world. The field license is owned by Gazprom, which in 2012 announced that it was postponing field development <u>«until better times»</u>.

The *«Valentin Shashin»* is 140 meter long and can drill on depths down to 6,500 meters. In the period 2005-2011, the ship operated under the name *«Deep Venture»* and was managed by Norwegian companies ARBA AS and Venture Drilling AS.

The Norwegian companies were given permission to lease the ship for up to 18 years for a price of \$21.000 per day, a sum far below the market value. The Norwegian companies subsequently leased the vessel to a third part for up to €400.000 per day, <u>RIA Novosti</u> reported.

The deal was highly controversial and then leader of the AMNGR in Murmansk, <u>Oleg</u> <u>Mnatsakanyan, was in 2013 sentenced to three years in jail.</u>



A 1989 photo of drillship "Valentin Shashin" in the Kola Bay. Photo: Thomas Nilsen

## Chinese oilmen make big discovery in Russian Arctic waters

## The rig «Nanhai VIII» drilled in the Kara Sea and revealed one of Russia's biggest natural gas fields.

By Atle Staalesen April 05, 2018 Barents Observer

The drilling revealed that the Leningradskoye field holds as much as 1,9 trillion cubic meters of gas. That is 850 million cubic meters more than previous estimates, Minister of Natural Resources Sergey Donskoy <u>writes in a Facebook post</u>.

It was the Chinese semisubmersible rig *«Nanhai VIII»* which in summer of 2017 drilled in the area. The 15,469 deadweight ton installation is owned by China Oilfield Services Limited (COSL) and drilling was made on water depths down to 160 meters.

The Leningradskoye license, which is owned by Gazprom, covers an area located west of the Yamal Peninsula in the Kara Sea. The drilling took place after two years of seismic mapping in the area.

With its upgraded resource estimates, the Leningradskoye field is one of the biggest hydrocarbon discoveries in Russian Arctic waters. It is still however far less than the Shtokman field in the Barents Sea, which holds about 3,9 trillion cubic meters.

The drilling at the Leningradskoye was the first offshore Arctic operation of the kind since the Norwegian rig "*West Alpha*" drilled the University-1 well for ExxonMobil in 2014.

That well revealed oil resources of more than 130 million tons. A second drilling <u>scheduled for 2015 was halted</u> as a result of Western sanction regime.

# Gazprom tests the ice in its northernmost license area

The Heiss area is located along the coasts of the Franz Josef Land and could hold up to 140 million tons of oil and 2 trillion cubic meters of gas. Now, Gazprom is training on how to remove icebergs from the harsh Arctic waters. By Atle Staalesen September 20, 2018 Barents Observer

Two powerful vessels on the 7th September started the towing away of giant icebergs in the northern part of the Barents Sea. It was the first ever exercise of the kind conducted by Gazprom, <u>the company informs</u>. The icebergs were up to 2 million tons heavy.

«We give the highest possible attention to this kind of training,» says Aleksey Davidov, General Director of subsidiary company Gazprom Geologorazvedka. «After all, we are talking about a unique region with very vulnerable nature and people working under extreme climatic conditions,» he adds in a comment.



Photo: sakhalin.gazprom-neft.ru

It was Gazprom Geologorazvedka that conducted the training and the two vessels involved both had icebreaking capacity, the company says. After completing the exercise in the northern Barents Sea, the vessels set course for the Kara Sea where they did oil spill training along the two rigs that currently is doing well drilling at the Rusanovkoye and Nyarmeyskoye fields.

The training with icebergs is likely to have taken place within the borders of the Heiss license area, a potentially very rich oil and gas field acquired by Gazprom in early 2015. <u>According to the company</u>, preliminary estimates include a resource

potential as big as 140 million tons of oil and condensate and 2 trillion cubic meters of natural gas.



The Heiss license area is located in the northernmost part of the Barents Sea. Map by sakhalin.gazprom-neft.ru

The license area is 86,300 square km big and located on up to 500 meter deep waters. It covers a lion's share of the waters between the archipelagos of Novaya Zemlya, Franz Josef Land and Severnaya Zemlya.

When Gazprom obtained the license, about 8,300 2D seismic mapping had been conducted in the area. The license area carries <u>the same name as an island located in</u> <u>the central parts of the Franz Josef Land.</u>

The region is characterized by complicated environmental and climatic conditions, the company underlines. «Both in the northwestern and northeastern part of the area there can be pieces of ice all year round.»



Photo: sakhalin.gazprom-neft.ru

## Two Russian rigs ready for Arctic drilling

Jackup rig «Arcticheskaya» has arrived in Murmansk after 5months of repair in Singapore, and sister rig «Amazon» is ready to spud wells in the Gulf of Ob.

By Atle Staalesen June 05, 2018 Barents Observer

It appears to be two Russian rigs that will be doing this year's well drilling in Russia's Arctic waters.

The *«Arcticheskaya»* on the 31st of May arrived in Murmansk after a two months transport operation from Singapore. The rig had undergone a series of planned repair works in a local yard, rig owner <u>Gazprom Flot informs in its corporate</u> <u>newspaper</u>. It was subsequently carried by heavy loads ship *«Albatross»* the long way towards the Russian Arctic.

The ship will be ready for exploration drilling in the Kara Sea this year, the company informs.

It is not clear exactly which wells are planned drilled, but it is likely to be in one of Gazprom's licenses areas, among them possibly the Leningradskoye field.

In 2017, well drilling was conducted at the Leningradskoye. But then, <u>the driller was</u> <u>Chinese company COSL and the rig was Nanhai VIII</u>. The drilling reportedly revealed that the Leningradskoye field <u>holds as much as 1,9 trillion cubic meters of</u> <u>natural gas</u>.

Meanwhile, jackup rig «*Amazon*» has been spending the whole winter in the remote Arctic port of Yamburg. The 6,570 ton installation <u>was in October 2017 transported</u> <u>to the shallow waters of the Ob Gulf</u>, whereupon Gazprom Flot started to build up a new crew.

## Russia goes all in on Arctic oil development

Tsvetana Paraskova, Oilprice.com Published 2:00 p.m. ET Oct. 24, 2017 | Updated 6:33 p.m. ET Oct. 24, 2017

The Arctic National Wildlife Refuge has been the subject of political debates for the past 40 years. Here are the facts about ANWR. Time

Neither sanctions nor persistently low oil prices are hindering Russia's ambitions or plans to develop oil resources in its sections of the Arctic.

In April, state-controlled oil giant Rosneft <u>started drilling</u> the northernmost well on the Russian Arctic shelf in the Khatangsky license area in the Laptev Sea. In June, Rosneft <u>struck first oil in the Eastern Arctic in this license</u>.

Earlier this month, the oil firm <u>said</u> that recoverable reserves at the field exceed 80 million tons of oil, which is equal to around 586.4 million barrels. Geological data point to reserves at the field at 298 million tons of oil, or some 2.184 billion barrels, and the oil is high quality — light and low-sulfur, according to Rosneft.

The Russian oil giant — whose CEO Igor Sechin is a close ally of Vladimir Putin — continues to drill at the field to study its geology, search for more oil, and define future drilling strategies at the license, Rosneft says.

Rosneft and Gazprom's oil unit Gazprom Neft are the <u>only two companies</u> allowed to drill in the Arctic offshore under Russia's legislation.

Gazprom Neft operates the only oil-producing platform in Russia's Arctic currently. The <u>Prirazlomnoye oil field</u> in the Pechora Sea started pumping oil back in late 2013. The field is estimated to hold 70 million tons of oil, or 513 million barrels, with annual production averaging 5.5 million tons (40.3 million barrels) at full capacity. More: Analysis: Are combustion engines reaching peak demand?

#### More: China: Where natural gas market could boom next

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Rosneft also plans to resume drilling in the Barents Sea next year and in the Kara Sea within two years, thus committing itself to conduct drilling works across the entire Russian section of the Arctic.

Rosneft holds 28 licenses in the Russian Arctic shelf that are estimated to have combined reserves of 34 billion tons of oil equivalent, or 249.22 billion barrels. Since 2012, Rosneft has invested \$1.74 billion in Arctic exploration, and will invest in 2017-2021 another \$4.354 billion.

Russia, for its part, has stated that Arctic oil and Arctic development are priorities in its policies, and is supporting development with financing in a kind of political message that sanctions won't deter its Arctic oil ambitions.

The U.S. Treasury <u>sanctions list</u> from 2014 prohibits the exports of goods, services (not including financial services), or technology in support of exploration or production for Russian deepwater, Arctic offshore, or shale projects that have the potential to produce oil.

While Western banks are still evaluating the potential impact of the latest round of U.S. sanctions on Russia from this summer, Moscow is <u>committing funds</u> to Arctic development. At the end of August, Prime Minister Dmitry Medvedev said that Russia will finance the development of the Arctic continental shelf and the economy of the local areas with more than \$2.787 billion by 2025. He said Russia's program for Arctic development rests on three pillars: boosting economic growth, developing sea infrastructure, and developing the continental shelf with modern technology and equipment.

As part of that program, in 2021-2025, the government will fund \$414.5 million for a program to build oil and gas equipment and technology and industrial machinery for exploration and development in the Arctic.

According to experts cited by Rosneft, the Arctic shelf is expected to account for 20-30 percent of Russia's total oil production by 2050.

It's not clear who will need Russian Arctic oil in 2050, but in the shorter term, Russia is betting on the Arctic, and Rosneft's exploration success this year could really pay off.

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## Canada

## **Arctic Regional Environmental Studies**

The Government of Canada is committed to the protection of the Arctic environment and to the sustainable and inclusive development of the Arctic region, informed by science and traditional knowledge, for the benefit of Northern residents and all Canadians.

Through funding commitments announced in Budget 2016, Indigenous and Northern Affairs Canada (INAC) launched the five year (2016-2021) Arctic Regional Environmental Studies (ARES) initiative. The goal of ARES is to examine the potential environmental and socioeconomic impacts of future offshore oil and gas activity in the Western Arctic (i.e. the Canadian Beaufort Sea Inuvialuit Settlement Region), Eastern Arctic (i.e. Baffin Bay and Davis Strait), and Central Arctic (i.e. the Kivalliq, Kitikmeot, and Arctic Islands of Nunavut regions of Canada).

ARES will provide relevant information to the Government of Canada as it considers future offshore oil and gas exploration in the Arctic. ARES is at the core of the science-based approach to oil and gas outlined in the <u>United States-Canada Joint Arctic Leaders' Statement (December 2016)</u>.

Offshore oil and gas resource development and conservation options will be investigated by undertaking strategic environmental assessments in both the Western and Eastern Arctic regions. In the Central Arctic, early engagement on resource and conservation considerations will begin.

- 1. <u>Beaufort Regional Strategic Environmental Assessment</u>
- 2. Strategic Environmental Assessment in Baffin Bay and Davis Strait
- 3. Central Arctic engagement

## 1. Beaufort Regional Strategic Environmental Assessment

The Beaufort Regional Strategic Environmental Assessment (BRSEA) was launched in 2016. The BRSEA will provide strategic direction and analysis of environmental considerations on future offshore oil and gas activity in the Beaufort Sea, Inuvialuit Settlement Region. The BRSEA:

• examines the effects of forecasted development and conservation scenarios,

- sets desired environmental outcomes and thresholds,
- addresses regional policy and regulatory issues
- takes into account changes in the environment.

The BRSEA is being developed and led in partnership between the <u>Inuvialuit Regional</u> <u>Corporation</u>, the <u>Inuvialuit Game Council</u>, and INAC.

For more information, including public records and notices pertaining to the BRSEA, consult the <u>Inuvialuit Regional Corporation's Regional Strategic Environmental Assessment website</u>.

# 2. Strategic Environmental Assessment in Baffin Bay and Davis Strait

The Strategic Environmental Assessment (SEA) in Baffin Bay and Davis Strait examines both the risks and benefits of the full life cycle of oil and gas activities. The assessment relies on traditional and scientific knowledge to consider potential interactions between oil and gas activity and the natural and social environment in the region. The assessment will consider other current and future activities in the region, including, but not limited to:

- traditional and modern community subsistence activities
- commercial fisheries
- the creation of conservation areas

INAC referred the SEA to the Nunavut Impact Review Board (NIRB) pursuant to section 12.2.4 of the *Nunavut Land Claims Agreement* (PDF Version (1.12 Mb, 292 pages)). The NIRB will be responsible for coordinating the SEA, including considering previously collected information and Inuit Qaujimajatuqangit (traditional Inuit knowledge), facilitating public engagement and submitting a final report to the Minister of Indigenous and Northern Affairs.

For public records and notices pertaining to the SEA, please refer to the NIRB Public Registry.

### 3. Central Arctic engagement

Future engagement activities in the Central Arctic will identify key interests and concerns of Inuit on economic development, resource management, and important conservation matters. These activities are proactive preliminary efforts to gage Indigenous perspectives and determine their knowledge holders.

Date modified:

2018-02-08

## **Trudeau, Where Is Your Back Up Plan For The Arctic Ban?**

By Irina Slav - Nov 08, 2017, OilPrice.Com



When Canada's federal government issued a five-year moratorium on oil and gas drilling in the Arctic at the end of last year, the environmentalist community rejoiced, just as it did in the United States, when the Obama administration did the same. Everyone seemed sure the move would bring benefits to everyone. Or perhaps they just didn't really care that there are communities heavily dependent on the oil and gas industry for their livelihood.

Now, the premier of Canada's Northwestert Territories has slammed Ottawa for its decision, along with others concerning the northern province, saying what we are witnessing today in that part of the world is "a return to colonialism."

In a statement issued earlier this week, Bob McLeod <u>said</u>, "*Restrictions imposed on our vital* energy and resource sector -40 percent of our economy and source of middle class jobs and incomes for many of our people – are driving companies away, and with that go the jobs that sustain healthy families and community life. Staying in or trying to join the middle class will become a distant dream for many."

Earlier this year, when he had to defend the ban to a northern community whose livelihood depended on the oil and gas industry, PM Justin Trudeau <u>said</u> that while *"one door of potential economic opportunity"* has been shut, the government would work on all levels to open new doors. Those new doors, however, still remain undefined and, as such, provide little peace of mind for the local communities affected.

Along with other decisions from the federal government being imposed on the Northwest Territories, according to McLeod, the ban on Arctic drilling demonstrates the lack of understanding in Ottawa that what works in the South doesn't necessarily work in the North.

There is a strong enough argument against Arctic drilling: an oil spill there would quickly wreak havoc on extremely sensitive ecosystems and it would be a hell of a job to clean it up. As one

Oilprice.com commenter said earlier this year when we reported on the ban, a large spill in the Arctic would bankrupt any company, as the Deepwater Horizon catastrophe is still too fresh in everyone's memory.

Yet there are also arguments in defense of drilling, however little environmentalists want to hear them. None of these arguments are new: The transition to all-renewable energy will be a slow one. Until it is complete, the world will need oil. A lot of this oil has already been depleted—and a lot of what remains is in the Arctic.

It's no wonder that Norway and Russia, two other Arctic countries, are focusing a lot of efforts on Arctic oil and gas exploration. And while Russia is not famous for a strong environmental lobby, Norway is among the greenest countries in the world, so the fact that Lundin, Statoil, and other E&Ps are <u>betting</u> big on the Arctic should be telling.

Cynically speaking, for the government in Ottawa, the voices of the First Nations in the Northwest Territories probably count less than those of the much more densely populated southern provinces. The ban will hardly be revoked and it's doubtful how willing the current license holders for Canadian Arctic blocks would be to utilize them.

This means that, in addition to inter-provincial rows elsewhere, such as between Alberta, which is complaining about the lack of enough pipelines to transport its oil, and British Columbia, which does not want tankers in its ports, now Ottawa also has to open those doors that Trudeau talked about in February.

By Irina Slav for Oilprice.com

## Iceland

### Iceland's Oil Dream in Peril as China, Norway Give Up Last Block

by Bloomberg

Mikael Holter & Ragnhildur Sigurdardottir

Tuesday, January 23, 2018

(Bloomberg) -- Iceland's hope of finding oil offshore its coast is fading after China and Norway decided to back out of the island nation's only remaining exploration license.

Cnooc Ltd., China's state-controlled producer, and Petoro AS, Norway's state-owned oil company, decided to relinquish their interest in the license, Iceland's National Energy Authority said in a statement on Tuesday. Their junior partner, Eykon Energy ehf, says it wishes to keep its 15 percent stake, but the agency said the small explorer doesn't have the technical or financial capacity to continue operations alone.

Iceland launched its first exploration round in 2009 as the nation was reeling from its economic collapse a year earlier. The north Atlantic island had high hopes, aiming to replicate the offshore success of Norway, western Europe's biggest oil and gas producer. Two other blocks have already been relinquished.

"The operator, Cnooc, didn't consider it attractive to continue to the next phase with such a low probability of finding commercially exploitable hydrocarbons," Petoro spokesman Christian Buch Hansen said in an email. "Petoro Iceland supported the operator's considerations and conclusion."

Eykon still sees "great opportunities" in the license, and asked the authority to give it time to look for other partners, board member Gunnlaugur Jonsson said in an interview.

The company now has three weeks to make its case to the government, the head of the Energy Authority, Gudni Johannesson, said in a separate interview. He didn't say whether that included presenting potential new partners.

All hope of finding and producing oil offshore Iceland isn't lost, Johannesson said. The agency has not put forth any current plans to issue new licenses, but Johannesson says the government may decide to do so at a later point.

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#### NATURE

## **Report: Oil exploration stopped in part of the Icelandic shelf, but prospectors haven't given up**

BY STAFF |JAN 6 2017

**OIL EXPLORATION IN ICELANDIC WATERS** Heiðar Guðjónsson, chairman of Icelandic oil exploration company Petoro has given up the search for oil in one part of the Dreki region, but continues the search with Chinese oil giant CNOOC in another part of the Icelandic continental shelf. Photo/Stöð 2

Search for oil or gas in a part of the Dreki region in the north-east part of the Icelandic continental shelf has been stopped after the exploration companies concluded that source rocks which might contain hydrocarbons are at a greater depth than originally hoped.

Exploration is still ongoing in one part of the Dreki region. Prospectors are still very optimistic oil will be discovered in Icelandic waters.

renewables

Read more: Iceland meets only 0.01% of it's electricity needs with fossil fuels, 99.99% from

**OIL EXPLORATION IN ICELANDIC WATERS** The Dreki region is believed to contain oil or gas deposits. Exploration is still underway in a large section of the region. Photo/Stöð 2-Iceland Magazine

The exploration companies, a Canadian company Ithaca Petroleum, and two Icelandic companies, Kolvetni ehf and Petoro Iceland ehf have their exploration licenses to <u>the</u> <u>National Energy Authority</u> which grants exploration licenses. Petoro is still engaged in oil exploration in a larger area to the south of the region where search has been stopped. **More oil than Norway?** 

Heiðar Guðjónsson, the chairman of Petoro, told <u>the local TV station Stöð 2</u> that the company and its partners, the Icelandic company Eykon and the Chinese oil giant CNOOC are optimistic they will discover oil. He added that the area might potentially contain more oil than the Norwegian oil fields in the North Sea.

The license which was relinquished yesterday is one of three exploration licenses granted in the Dreki region in 2013 and 2014. The first license was returned last year, leaving only the license granted to CNOOC, Petoro and Eykon still valid. Research in this area will continue for at least a year.

Read more: *Gold prospectors interested in Icelandic geothermal areas* Oil and gas exploration in Iceland?



**DREKI AREA AND GAMMUR AREAS** The two regions of Icelandic waters which might potentially contain oil or gas deposits. Photo/Icelandic Energy Authority

The three areas in Icelandic waters where oil and gas exploration has taken place are located in the Dreki region, which includes the southern tip of the Jan Mayen microcontinent. Based to its geological similarity to nearby sites containing oil and gas in the Northeast Atlantic Ocean basin the Jan Mayen Ridge is believed a likely site of oil or natural gas deposits.

A number of surveys have been made in the northern part of the Dreki Area, indicating the presence of thick continental crust which might potentially include rock dating to the Jurassic and Cretaceous periods. Exploration is still ongoing in the final of three exploration areas in Dreki.

A second major area, Gammur, north of Iceland, is a relatively young sediment basin of about 9 million years, with a 4 km thick layer of sediments. Indications have been found of gas escaping the sediments. The source and nature of the gas has not been determined.

## USA

## Eni US Operating Co., Inc. - 2017 Beaufort Sea EP

## ABOUT THE ENI 2017 BEAUFORT SEA EXPLORATION PLAN

Eni US is a subsidiary of Italian multinational oil and gas company Eni S.p.A. In its plan, Eni proposes to drill into the federal submerged lands of the Beaufort Sea from their Spy Island



Drillsite, a pre-existing facility located on an artificial gravel island in Alaska state waters.

## Eni says drilling at Nikaitchuq could resume as early as this fall

### Eric Lidji

### for Petroleum News July 29, 218

Eni could resume development drilling at the Nikaitchuq unit as soon as this fall, if the timing and results of its ongoing exploration campaign in the region accommodate.

In its 11th plan of development for the North Slope unit, the local subsidiary of the Italian major announced plans to drill as many as three new wells and to add laterals to as many as eight existing single lateral wells at its Spy Island Drillsite as soon as October 2018.

The work depends on the progress at the Nikaitchuq North exploration project. The start of that project was delayed back in December 2017 and now faces seasonal restrictions.

The planned development work depends on the ongoing exploration program in part for a very practical reason: Eni is using the same rig - Doyon 15 - for both drilling efforts.

The relationship between the two programs may also concern drilling targets. In its plan, Eni said that the development program could begin as early as late 2018 "pending the results and scope of exploration work." From the beginning, the purpose of the exploration program was to add reserves to Nikaitchuq and to increase oil production.

The Nikaitchuq unit is located in nearshore state waters north of the Kuparuk River unit.

#### **Upcoming plans**

The plan for the current year, running through September 2019, calls for drilling three new wells at Spy Island and converting eight existing Spy Island wells into multilaterals.

According to a drilling schedule in the plan, the new Spy Island wells are SP03-FN9, SP06 and SI02-SE6, planned for October 2018 through late February 2019. (In a different part of the plan, Eni lists SP03-FN9, SI02-SE5 and SI06-FN8.) The eight new laterals are SP33-W3, SP30-W1L1, SP16-FN3L1, SP27-N1L1, SP23-N3L1, SP10-FN5L1, SP18-N5L1 and SP05-FN7L1, planned for late February 2019 through mid-September 2019.

Under the current naming conventions used at Spy Island, wells beginning with "SP" represent productions wells while wells beginning with "SI" represent injection wells.

Eni is using Doyon 15 for its Spy Island program. The company contracted the rig in preparation for its Nikaitchuq North exploration program earlier this year. The program involved drilling an ultra-extended reach well from the Spy Island Drillsite into federal waters north of the Nikaitchuq unit, and the rig required considerable modification.

The timetable of the proposed development activities depends on the timing and results of the NN-01 exploration well being drilled into the Harrison Bay Block 6423 Unit.

Eni had initially planned to spud the well by Dec. 10, 2017, completed the well in mid-February 2018 and conduct flow testing between mid-February and mid-March 2018.

The actual spud date was pushed to Dec. 23, with drilling activities beginning in February 2018 and expected to continue into mid-July, with flow testing occurring in late July or August. The delays forced the company to defer plans to drill a sidetrack in order to comply with summer drilling restrictions in the waters off the North Slope. The company still plans to drill a NN-02 appraisal well during the upcoming winter exploration season.

The company is not planning to resume development drilling from the Oliktok Point Pad but does plan to continue its ongoing workover activities from the pad in early 2019.

The company is also planning to conduct workover activities on Spy Island wells.

#### **Prior suspension**

Eni suspended development drilling at Nikaitchuq in May 2015 in response to the global downturn in oil prices. The suspension occurred as the company was completing some of its initial development plans and was beginning to consider expansion opportunities.

The company completed its initial drilling plans for the Oliktok Point Pad in October 2012 and conducted a sidetrack campaign on select wells in 2013 and 2014. The additional work also included an appraisal in mid-2014 to evaluate an N sand target. All the previous wells drilled from the Oliktok Point Pad had targeted an OA reservoir.

Since the end of the sidetrack program in May 2014, all development activity at the Oliktok Point Pad shifted from drilling to workover operations. The company eventually released its Nabors 245 rig in late 2017 and contracted the Nordic Calista 4 rig.

A continuous drilling program at Spy Island began in November 2012. The program was expanded in early 2013 with the first multilateral at Nikaitchuq and expanded again in late 2013 with a campaign to add a second lateral to all new Spy Island production wells.

The company conducted the West Extension Project at Spy Island between the third quarter of 2014 and early 2015 and launched the East Extension Project in 2015, before suspending all drilling activities at the unit and putting the Doyon 15 rig in cold stack.

Average daily production at Nikaitchuq peaked in late 2015 at around 27,000 barrels per day, according to Eni. The unit had produced 45 million barrels through April 2018.

- ERIC LIDJI

### Geophysical Applications for Permits

BOEM received an Application for a Permit to Conduct Geophysical (G&G) Exploration for Mineral Resources on the Outer Continental Shelf (OCS) from TGS-NOPEC. TGS plans to conduct a 3D OBN seismic data acquisition program in the Beaufort Sea OCS Planning Area, Alaska.

**May 11** BOEM opens a public comment period for an EA to be prepared relating to G&G permit application 18-02. TGS's proposed seismic survey would acquire data on approximately 620 square miles of OCS waters under BOEM jurisdiction. The survey would be conducted in phases, over multiple years (2018 - 2020) between approximately July 1 and Oct. 31.

### Current Active Arctic Leases



### 2019–2024 Draft Proposed Program Lease Sale Schedule

2019 Alaska Beaufort Sea 2020 Alaska Chukchi Sea 2021 Alaska Beaufort Sea 2022 Alaska Chukchi Sea 2023 Alaska Chukchi Sea 2023 Alaska Hope Basin 2023 Alaska Hope Basin 2023 Alaska Norton Basin 2023 Alaska St. Matthew-Hall 2023 Alaska St. Matthew-Hall 2023 Alaska Aleutian Basin 2023 Alaska St. George Basin 2023 Alaska Bowers Basin 2023 Alaska Aleutian Arc

# 2019 Beaufort Sea OCS Oil and Gas Lease Sale

The 2019-2024 National OCS Oil and Gas Leasing Draft Proposed Program (DPP) provides for three OCS Oil & Gas lease sales in Alaska's Beaufort Sea: One each in 2019, 2021 and 2023. These lease sales have not yet received numerical designations.



The 2019-2024 DPP has not yet been approved, and a sale cannot take place unless the program in which it was proposed has been approved. But a great deal of advance planning is required to conduct a lease sale. The fact that BOEM staff have initiated planning for these potential lease sales does not mean a decision has been made as to whether or not to hold these sales.

The 2019-2024 National OCS Oil & Gas Leasing Program is expected to be finalized in 2019. The proposed 2019 Beaufort Sea lease sale, if kept on the schedule, would be held later in 2019.

## **Arctic Slope Regional Corporation Exploration, LLC Leases**

Background

ASRC Exploration, LLC (AEX) is an Alaska Limited-Liability Company formed in 2008 as a subsidiary of Arctic Slope Regional Corporation (ASRC). ASRC is owned by and represents the business interests of the Arctic Slope Iñupiat.

Corporate headquarters are based in Barrow, Alaska, with administrative and subsidiary offices located in Anchorage and throughout the United States. ASRC, along with its family of companies, is the largest Alaskan-owned company, employing approximately 10,000 people worldwide. The company has six major business segments: petroleum refining and marketing, energy support services, construction, industrial services, government services and resource development.

AEX acquired 21 leases from Shell effective November 30, 2016 and received concurrence from the Bureau of Ocean Energy Management of lease assignments in January 2017. Nineteen of the 21 leases were scheduled to reach the end of their primary terms during the second half of 2017. All 21 leases are located in the Camden Bay area of the Beaufort Sea approximately 8-25 miles off of the northern shore of the Alaska North Slope.

AEX submitted parallel requests on February 10, 2017 to unitize its leases and obtain a suspension of operations.

On July 11, 2017, BSEE approved including 20 of the 21 leases into the newly formed Taktuk unit.

Only 20 of the 21 leases were included in the Taktuk unit as AEX did not submit sufficient seismic data to have the additional lease, lease Y-1945, included in the approved unit. AEX then submitted a second SOO request for the excluded lease Y-1945. Subsequent to that, BSEE has engaged with AEX to refine the schedule of work associated with the SOO requests, culminating in a final submittal from AEX in March 2018.

Suspension Request Approval

The suspension of operations requests for the 20-lease Taktuk Unit and the separate lease Y-1945 were approved by BSEE April 13, 2018. The Suspension of Operations approvals require AEX to meet certain conditions, to include a quarterly report to BSEE that clearly demonstrates AEX is meeting requirements set forth in the approved SOOs. The first quarterly report is due 15 days after the end of the calendar quarter in which the approval was issued, unless an extension is requested in writing by AEX and approved by BSEE. The approval letter has been posted to BSEE's web site for public viewing.

### Historical Facts

The Taktuk unit contains two historical exploration wells, Hammerhead #1 and Hammerhead #2, which were drilled in 1985 and 1986, respectively. Union Oil Company drilled the two exploratory wells. Shell re-purchased many of the original previously leased areas again in 2005. In 2006, Shell submitted an exploratory program that proposed drilling four wells (Sivulliq N and Sivulliq G and Torpedo H and Torpedo J). In 2012, Shell began drilling Sivulliq N but due to delays and challenges they were only able to drill a portion of the well before the program was canceled.



Arctic Slope Regional Corporation Exploration, LLC (AEX) Leases

-- BSEE --

# US approves Alaska offshore drilling from gravel island

By DAN JOLINGPublished July 13, 2017MarketsAssociated Press

Petroleum exploration has largely ceased in federal waters off Alaska but an Italian multinational oil and gas company has received permission to move ahead with modest drilling plans on leases sold in 2005.

The federal Bureau of Ocean Energy Management late Wednesday announced conditional approval of an exploratory drilling plan submitted by Eni US Operating Co. Inc., part of Eni S.p.A. The company plans to drill four exploration wells from the Spy Island drill site, an 11-acre (.04-square kilometer) artificial gravel island constructed in state of Alaska waters 6 to 8 feet (1.8 to2.4 meters) deep. It's one of four artificial islands in the Beaufort Sea off Alaska's north coast that support oil production.

Former President Barack Obama last year banned oil and gas exploration in most of the Arctic Ocean. President Donald Trump in April ordered Interior

Secretary Ryan Zinke to review the ban with the goal of opening offshore areas. Environmental and Alaska Native groups in May sued to maintain the ban.

Environmental groups say potential Arctic Ocean spills put polar bears, bowhead whales and other marine mammals at risk.

Eni's leases would have expired at the end of 2017, said Kristen Monsell, an attorney for the Center for Biological Diversity, in a prepared statement. Eni's plan calls for extended-reach wells that could stretch more than 6 miles (9.7 kilometers) into federal waters. The Trump administration provided the public only 21 days to review and comment on the exploration plan and only 10 days to comment on scoping for an environmental assessment, she said.

"Approving this Arctic drilling plan at the 11th hour makes a dangerous project even riskier," Monsell said. "An oil spill here would do incredible damage, and it'd be impossible to clean up."

Personnel at Eni's office in Anchorage said they could not comment and forwarded a request for comment to company officials in Milan.

The artificial island currently supports production wells on state of Alaska leases.

The federal exploration plan proposes two extended-reach main holes and two "sidetracks" to evaluate oil and gas at federal leases. The exploration wells would begin from the island and extend to the ocean floor to the federal leases.

Armstrong Oil and Gas submitted the original winning lease bids at a 2005 federal lease sale. Eni proposes winter-only drilling starting in December and ending in May 2019.

The permit does not authorize Eni to produce oil. That would require submission and approval of a development and production plan.

## Hilcorp's proposed Arctic Ocean oil development gets public review Tuesday

Author: <u>Alex DeMarban</u> Updated: October 9, 2017 Published October 9, 2017

Conservation groups and industry supporters will face off in Anchorage Tuesday night as federal regulators wrap up hearings on a proposal to build the first offshore oil production facility in the Arctic Ocean's federal waters.

Hilcorp Alaska's <u>Liberty Prospect</u> could produce up to 65,000 barrels of oil daily, boosting the Alaska economy with increased oil production and more jobs, supporters say.

Environmental forces fear development will threaten critical subsistence resources, such as bowhead whales hunted by Alaska Native communities.

Hilcorp Alaska's safety record will be a target for opponents of the proposed 9.3-acre gravel island. The company seeks to build the drilling island about 5 miles off the Alaska coast, east of the Prudhoe Bay oil fields.

The Houston, Texas-based company over the winter suffered a subsea natural gas leak in Cook Inlet that took more than three <u>months to repair</u>. The state's oil-well regulators, the Alaska Oil and Gas Conservation Commission, have blasted Hilcorp for a long list of safety violations, though Commissioner Cathy Foerster has <u>said the company</u> is taking steps to improve.

"That's not the type of performance we'd like to see from industry, so that needs to be part of discussion," said Lois Epstein, Arctic program director for The Wilderness Society, on Monday.

Carl Portman, deputy director of the Resource Development Council, said the group will speak Tuesday about the need for safe oil development that helps Alaska grow out of its current recession.

Hilcorp's plans for constructing the gravel production island are similar to other production islands that have operated for years in the state's near-shore Arctic Ocean waters, within three miles of the coast.

Those islands include Oooguruk, operated by Caelus Energy, and Endicott, operated by BP.

"This is not an offshore development that's 100 to 150 miles off the coast," Portman said. "It would be well-protected from the polar ice cap because it's sheltered by a belt of offshore barrier islands."

The Bureau of Ocean Energy Management is taking public comment on the draft

Environmental <u>Impact Statement</u> it issued on Aug. 17, a more than 1,000-page document analyzing the project's potential environmental impacts. Hilcorp submitted the production plan with the agency in 2015.

The hearing Tuesday night will wrap up a series of public meetings that included Fairbanks and three North Slope communities. The hearing is planned for the Dena'ina Civic and Convention Center, from 7 p.m. to 10 p.m.

The agency will also take public comments through Nov. 18, at <u>www.regulations.gov</u>. About this Author

#### <u>Alex DeMarban</u>

Alex DeMarban is a longtime Alaska journalist who covers the oil and gas industries and general assignments. Reach him at 907-257-4317 or alex@adn.com.

### **PUBLIC INFORMATION**

U.S. Department of the Interior Bureau of Safety and Environmental Enforcement (BSEE)

Submit original plus THREE copies, with ONE copy marked "Public Information." OMB Control No. 1014-0025 OMB Approval Expires 04/30/2020

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The State of Alaska has production from offshore oil fields including North Start and Endicott, (both are mature fields), the Oooguruk and the Kitaitchuq Fields, and exploration in Smith Bay.



## At Inuit assembly, Alaska leader promotes oil development—on Inupiat terms

"We want an equity share of projects that are developed in our region" ARCTIC TODAY Around the Arctic July 26, 2018



ASRC president Rex Rock speaks at the gathering of the Inuit Circumpolar Council in Utqiagvik, Alaska, last week. (PHOTO COURTESY OF YERETH ROSEN/ARCTIC TODAY)

### YERETH ROSEN

Standing in the gymnasium on a school built with oil money, in city with public services funded by oil and with homes that are heated by natural gas that is a byproduct of oil development, the chief executive of the world's richest Indigenous organizations on Wednesday, July 18, gave a full-throated endorsement of Arctic oil development.

"You see, our region is dependent upon the economy that oil and gas development brings," Rex Rock, CEO of the Arctic Slope Regional Corp., said in a speech at <u>the Inuit</u> <u>Circumpolar Council's general assembly</u>, held last week in the northernmost U.S. community, Utqiagvik, Alaska.

The assembly, convened every four years, draws attendees from around the Inuit regions of the world—Alaska, Canada, Greenland and Russia. Nearly 1,000 have

converged on Utqiagvik, site of the 2018 assembly, where the theme is "The Arctic We Want."

In his speech, part of a session on economic issues, Rock explained what the Inuipiat people of Alaska want from oil development.

It is "no secret" that the Arctic Slope Regional Corp., based in Utqiagvik and owned by the Inupiat people of the North Slope, supports oil development in the region, he said. But that development, now "thriving" because of new discoveries, new technologies and new exploration opportunities like the just-opened Arctic National Wildlife Refuge, must be on Inupiat terms, he said.

"We want an equity share of projects that are developed in our region," he said.

Such participation can be complicated, he admitted.

"Is there a risk in us partnering? You bet. But it gives us skin in the game. Does that change our viewpoint? You bet. We have to be diligent and work with developers, explorers and agencies on the best path forward. Will this be easy? No way. There will be things that don't go right. There is no perfect path, but we have to continue to try," he said. "By having a seat at the table during the decision process, we will have the opportunity to influence projects for protection of our rights as indigenous people."

ASRC, which has oil interests ranging from mineral rights below the ground to support services above it, has been open about its advocacy of continued oil development, both onshore and offshore, Rock said. He confessed to some reservations about the latter. "I'm a whaling captain first. And as a whaling captain, the evolution from onshore oil exploration and production to offshore raises concerns for me and other North Slope captains."

Offshore Beaufort Sea leases—a collection of exploration tracts acquired from Royal Dutch Shell—are part of ASRC's oil-lease portfolio.

In a keynote address that focused on environmental issues, Mary Simon, a former ICC president, cited Arctic shipping as one opportunity.

"As the ice melts, the ships are coming. If it's not oil and gas exploration, it's for commercial shipping and tourism. More and more larger and larger ships are coming, and more and more smaller vessels are coming each year," said Simon, who spoke by Skype from her home of Nunavik in Arctic Quebec.

In addressing environmental threats posed by more shipping, Arctic people could help themselves economically, Simon said. She called for more planning "so when that increased shipping comes to the Arctic are we prepared to meet the inevitable spills and take advantage of the jobs and training opportunities." Charlie Watt Sr., president of the Makivik Corporation of northern Quebec and a former Canadian senator, spoke about opportunities in renewable energy. In addition to reducing living costs and improving quality of life in the Arctic, development of renewable energy can attract new business, Watt said in a speech. He cited mining companies that are now more interested in operating in Nunavik. "We are investing in renewable energy because it has tremendous spinoffs for our region," he said.

Watt also promoted an economic strategy that looks outward.

At a time of increasing international aggression and protectionism, the Inuit can go in the opposite direction, he said. His suggestion: "The creation of Inuit free trade across the Inuit homeland."

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