

Heavy ice could delay start of Shell Alaska's Arctic drilling

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The heaviest polar ice in more than a decade could postpone the start of offshore oil drilling in the Arctic Ocean until the beginning of August, a delay of up to two weeks, Shell Alaska officials said.

Unveiling a newly refurbished ice-class rig that is poised to begin drilling two exploratory wells this summer in the [Beaufort Sea](#), Shell executives said Friday that the unusually robust sea ice would further narrow what already is a tight window for operations. The company's \$4-billion program is designed to measure the extent of what could be the United States' most important new inventory of oil and gas.

Shell has pledged to end its first season of [exploratory drilling](#) by Oct. 31 in the Beaufort Sea and 38 days earlier in the more remote Chukchi Sea to remain within the relatively ice-free summer season.

Meeting with reporters and Sen. Mark Begich, D-Alaska, on board the Kulluk drilling rig in the Seattle shipyards, Shell's vice president for Alaska operations, Pete Slaiby, said the company had given up on its controversial attempt to win permission from the federal government to extend Chukchi drilling though October as well.

"Not this year. I think it's a done deal," he said.

The summer ice melt in the Arctic has often reached record levels in recent years in what many scientists believe is a sign of climate change. But this year a high pressure zone over the coast of Alaska, low [winter](#)

[temperatures](#) and certain [ocean currents](#) have combined to bring unusually large amounts of ice not only to Alaska's northern coast, but farther south in the Bering Sea as well, [National Weather Service](#) officials said.

"I do think it's going to be a slow breakup this year," Kathleen Cole, sea ice program leader for the weather service, told the Los Angeles Times.

The result is that while Canadian waters in the far northern Atlantic have relatively low ice levels, Alaska is an iceberg - at least for now.

"We're seeing multiyear ice that they've not seen in such large quantities in over a decade, and it could impact our ability to start the well," Slaiby said. Of particular concern, he said, is the region of the Chukchi Sea around the company's Berger Prospect - potentially the crown jewel of the company's offshore oil inventory - which in normal years would be accessible by mid-July. This year, it may be unreachable until late July or early August.

Company officials say they need shore-fast ice to retreat at least one nautical mile from the coast of Point Barrow, the northernmost tip of the Alaskan coast, before proceeding.

"Point Barrow is the choking point for the ice. If you can get around Point Barrow, the Beaufort Sea will pretty much be open," said Eric Whatley, drilling supervisor on the Kulluk.

Although offshore drilling operators in the 1980s and 1990s might have used icebreakers to plow a path to ice-bound drilling sites, Shell has committed during its new round of operations to avoid icebreakers as a means of minimizing disturbances to wildlife, including polar bears, walrus and bowhead whales.

"You've got to work with nature in this job. You can't hurry. You might want to go, but you can't do it till the conditions are right," Slaiby said.

Shell Alaska is preparing to tow the 160-foot Kulluk derrick next month to Alaska, where it may wait in Dutch Harbor before sailing north to the Beaufort Sea, depending on weather conditions, officials said. A second drilling rig, the Noble Discoverer, will set sail for operations in the Chukchi Sea. The Discoverer, which got a more limited upgrade, will drill one or two wells in the Chukchi.

Friday's tour was to showcase the \$150-million refurbishing the company has undertaken on the 29-year-old Kulluk [drilling rig](#), recently resurrected from nearly a decade of cold storage in the Canadian Arctic.

The rig has been equipped with four new diesel engines and equipment designed to dramatically reduce potential air pollution in the pristine region. Recent tests have shown a 90 percent to 95 percent reduction in nitric oxide and nitrogen dioxide emissions and substantial reductions in particulate emissions compared with the rig's previous levels, Shell officials said.

The refurbishments also include 4,200 barrels in onboard waste storage to achieve "zero discharge" targets - meaning no wastewater, ballast water or drilling muds and cuttings will be discharged into the Arctic seas. Instead, they will be held aboard the two drill ships for permanent disposal at a certified landfill in the Lower 48 states, Slaiby said.

Shell officials said they've completed one of the most important parts of the company's oil spill response program for the Arctic, a preconstructed capping stack. That piece of equipment will be positioned offshore with the drill ships and ready to deploy in the event of a well blowout that can't be controlled by the beefed-up blowout preventers to be installed in each well.

The capping stack, modeled on the equipment that finally stopped the flow of oil in the 2010 BP spill in the Gulf of Mexico, is in Portland, Ore., and will be tested in Puget Sound near Seattle within the next few weeks, Slaiby said.

Shell still must obtain final [drilling](#) permits for both offshore leasing areas before sending down the first drill bits, but those are expected to be approved once the new emissions equipment and capping stack are tested.

Conservationists have filed lawsuits challenging air emission permits approved by the Environmental Protection Agency, and Shell has launched a pre-emptive suit in an attempt to get other potential environmental challenges aired quickly.

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