

SHELL'S ARCTIC FAILURES – A CAMPAIGN BRIEFING

July, 2015

1. OVERVIEW

On 29 January 2015, Royal Dutch Shell confirmed that it intended, subject to regulatory approval, to resume its US Arctic drilling programme. The cost for 2015 would be at least \$1bn.¹

Shell's exploration plan was formally approved by the US government in early May,² by which time the company had already begun to move drilling units and infrastructure towards Alaska, ahead of this summer's short drilling window.³

Shell's 300-foot-high floating rig, the Polar Pioneer, is currently positioned 70 miles off the Alaska coast after departing Dutch Harbour in the Aleutian Islands, in July.⁴ It was given its final permit and the green light from the US government on 17 August to begin drilling in the icy waters of the Chukchi Sea,⁵ but not before Shell had to patch up a sizable hole in the hull of one of its icebreaker ships, the Fennica, forcing the vessel to retreat to Portland for repairs.⁶

Shell's second rig, the Noble Discoverer, is currently on site in Alaska, although Shell's plans to drill two wells simultaneously were abandoned due to a permit breach.⁷

Shell's Arctic programme has so far been a failure despite capital expenditure (capex) in excess of \$6bn.⁸ The company's 2012 drilling season was beset by multiple operational failings (and heavily criticised by two official US government reports)⁹ and was followed by a drilling 'pause' in 2013 and the cancellation of its 2014 plans because of a US court decision.¹⁰

A closer look at Shell's history in the Arctic, the history of the drilling units it plans to use (and their specifications) makes it clear that its operation in the Chukchi Sea can't be performed safely.

2. SHELL'S EXPLORATION PLAN FOR THE CHUKCHI SEA

In December 2014, Noble Drilling, one of Shell's biggest Arctic sub-contractors and owner of the Noble Discoverer, pleaded guilty to committing eight felony offences in connection with Shell's botched attempts to drill in the Arctic Ocean in 2012.¹¹ The operator agreed to pay \$12.2 million for some staggering offences: in Noble's plea agreement, it owned up to improperly discharging oily water into the ocean and covering up or neglecting to report a litany of engine and other system failures that it knew about, even before it got to the Arctic Ocean.¹²

The Polar Pioneer rig, owned by Transocean is new to Shell and the Arctic.¹³

Shell's poor operational record in the Alaskan Arctic in 2012 - the last season they were active there - does not inspire confidence in their current plans. At the same time there is growing industry and investor scepticism about the operational and economic feasibility of offshore North American Arctic oil exploration. Many of the issues which lay at the heart of Shell's 2012 setbacks remain unresolved.

New independent research by the National Academy of Sciences makes it clear that there is no effective way to clean up a spill in the frozen, stormy and remote Arctic Ocean which challenges Shell's claims on its oil spill response capability.¹⁴

The US government estimates a 75% chance of a major spill if the recoverable oil in the Chukchi Sea is pumped or produced there, while US government funded research from September 2014 raises serious concerns over the ability to deal with a major spill.¹⁵

3. SHELL'S ARCTIC HISTORY

- **2009** - Shell submits its first exploration plan. It wants to drill three wells at five potential drill sites with the drillship Noble Discoverer.¹⁶
- **2010** - The exploration drilling activities are postponed since BOEM suspended all drilling¹⁷ activities because of the Deepwater Horizon blowout accident.
- **2011** - Shell submits a revised drilling plan where it wants to drill six potential wells at the Burger prospect in the Chukchi Sea using the drillship Noble Discoverer and the Kulluk rig in the Sivulliq and Torpedo prospects in the Beaufort Sea.¹⁸

2012

- **2012:** The drillship Noble Discoverer is mobilized to the Burger A prospect whilst the Kulluk rig is mobilized to Sivulliq in the Beaufort.
- **2012 – June 28th:** Drilling fleet fails to meet air pollution control standards. Shell asks for an exception to the rules.
- **2012 – July 1st:** Shell admits it will not “recover” 90 percent of any oil it spills in the Arctic Ocean, as it had claimed, but would only “encounter” it.
- **2012 – July 14th:** Noble Discoverer drill ship slips anchor and drifts out of control in Dutch Harbor, Alaska.
- **2012 – August 30th:** Shell obtains permission for only limited preparatory drilling in the Chukchi Sea. Because of delayed U.S. Coast Guard certification of its refurbished, 36-year-old spill-response barge, the Arctic Challenger, Shell is not allowed to drill for oil in 2012.
- **2012 – September 15th:** During sea trials, Shell's oil-containment dome is “crushed like a beer can” when lowered into Washington state's Puget Sound.
- **2012 – November 16th:** Dutch Harbour residents hear and feel a loud explosion as the Noble Discoverer's engine backfires and ignites a fire in one of the vessel's stacks.
- **2012 - November 29th:** Coast Guard detains Noble Discoverer in Seward for serious problems with the ship's safety and pollutant discharge systems.
- **2012 – December 31st:** Kulluk drill rig runs aground near Kodiak Island, Alaska, after multiple failures with towing operations and drifts out of control during a winter cyclone. Prior to the grounding, all four engines fail on Shell's contractor's brand new tug, the Aiviq.

2013

- **2013 – February 22nd:** The Coast Guard finds 16 serious safety and environmental violations on a Shell drilling rig used in the Arctic waters off Alaska. The matter is turned over to the U.S. Department of Justice.
- **2013 – February 27th:** Shell announces that it will “pause” all drilling operations for 2013 in Alaska's Beaufort and Chukchi Seas to prepare equipment and plans for a resumption of

activity at a later stage. The Noble Discoverer and Kulluk rigs are shipped to Asia for major repairs.

- **2013 – October 31st:** Shell announces plans to drill in the Chukchi Sea in 2014 but says its scaled-back approach will not include the Beaufort Sea. The damaged Kulluk rig is later scrapped, and replaced with a rig owned by Transocean, the contractor that operated the Deepwater Horizon.

2014

- **2014 – January 31st:** Shell's announces it will not drill in the Arctic during 2014. It cites a steep drop in quarterly profits, and a court decision that invalidates the Environmental Impact Statement underpinning their leases.

- **2014 – December 8th:** Noble Drilling LLC admits keeping false and incomplete records, and willingly failing to notify the U.S. Coast Guard of hazardous conditions aboard the drill ship Noble Discoverer. Noble agrees to \$12.2 million in penalties and is put on probation for four years.¹⁹

2015

- **2015 - January 29th:** Shell announces its intention to resume its Arctic drilling programme with a plan to drill simultaneously with two wells in the Arctic's Chukchi sea.

- **2015 - February 20th:** Obama administration announces new rules that require oil companies to submit detailed and Arctic-specific safety plans, covering the entire range of operations, shaped by the 2010 BP oil spill in the Gulf of Mexico, and the grounding of Shell's drill rig in the Arctic two years later.²⁰

- **2015 - May 11th:** US regulator BOEM conditionally approves Shell's exploration plan to drill in the Arctic this summer.

- **2015 - May 22nd:** Shell's third party audit of its contractor (the root of so many of its 2012 problems) – recommended by the Department of the Interior in 2013 as a condition to Shell's return to the Arctic – remains under wraps with Shell refusing permission for its disclosure.²¹

- **2015 - June 27th:** Polar Pioneer arrives in Dutch Harbor, Aleutian Islands, Alaska, where it waits before moving further into the Arctic.²²

- **2015 – June 30th:** Noble Discoverer departs Washington bound for the icy Arctic waters of Dutch Harbour, Alaska.²³ A US regulator issues a letter of authorisation relating to the harassment of mammals and confirmed that Shell's drilling rigs must be a minimum of 15 miles apart. This means Shell will not be able to drill two rigs simultaneously as planned, because none of their proposed 2015 drilling sites meet this spacing requirement.²⁴

- **2015 – July 1st:** The UN's World Heritage Committee demands the US government submit written guarantees that oil exploration in the Arctic's Chukchi Sea will not affect the UNESCO site of Wrangel Island positioned to the west of Shell's drilling site. If the countries fail to submit this guarantee, the island could be placed on the World Heritage 'In Danger' list. Shell's own Arctic oil spill response plan shows that an oil spill from the company's wells could hit the island within weeks.²⁵

- **2015 – July 10th:** One of Shell's icebreaker ship, the Fennica, is forced to return to Portland, Oregon from Alaska, for repairs due to a one-metre hole in its hull. The Fennica is a key piece of Shell's equipment, carrying the capping stack that would be used to seal a well in case of a blowout.²⁶

- **2015 – July 29th**: Attempting to return to the Arctic, the Fennica is delayed by Greenpeace activists suspended below Portland Bridge, blocking the harbour for 40 hours. ²⁷

- **2015 – August 18th**: Obama administration grants Shell final permit to drill for oil in the Chukchi Sea. ²⁸

4. THE NOBLE DISCOVERER

Shell has contracted the Noble Discoverer from Noble Drilling for its 2015 Arctic programme for a day rate of \$393,000. ²⁹

The Noble Discoverer is one of the oldest drill ships in the world. Built in 1966 and originally a bulk carrier called the Matsuhiko Maru, it was converted in 1976 for energy exploration operations and renamed Frontier Discoverer. The name was changed again to Noble Discoverer when drilling company Frontier Drilling merged with fellow driller Noble Corporation. ³⁰ In 2005 Shell contracted Frontier Drilling (now Noble Drilling) for their Arctic programme. ³¹ The ship is operating under the flag of Liberia, a flag of convenience. ³²

The Noble Discoverer has been charged with environmental and maritime crimes. ³³ Even though the age of the ship (49 years) is one of the reasons why it has had so many problems, it's certainly not the only one. In 2011 the Noble Discoverer's mooring lines snapped and left the drill ship drifting free when it was working in New Zealand off the coast of South Taranaki. ³⁴ In the same year, New Zealand authorities found 10 safety deficiencies on the Noble Discoverer including "failure to show evidence of minimum safe staffing, inoperable navigation lights, compass errors, overdue lifeboat drills, and various certifications that were expired". ³⁵

Shell contracted the Noble Discoverer for its first Arctic exploration attempts in 2012. See the above timeline in Section Three for the full catalogue of problems and incidents.

5. THE POLAR PIONEER

The Polar Pioneer is a drilling rig built in 1985 and owned by Transocean, the company that owned the Deepwater Horizon rig that exploded in the Gulf of Mexico 2010, killing 11 people and causing the worst oil spill in US history. ^{36, 37} It is operating under the flag of the Marshall Islands. ³⁸

Polar Pioneer replaces Shell's previous rig Kulluk for its first attempt to exploit the Arctic since 2012. The Kulluk ran aground and almost caused a major accident when being towed across the Gulf of Alaska in a winter storm. ³⁹ The drill rig was so badly damaged by the grounding that it had to be scrapped. ⁴⁰

Shell wanted to use the Polar Pioneer to drill any potential relief wells as part of its plans for 2014. The Polar Pioneer was supposed to be stationed at a place called Dutch Harbor in the Aleutian Islands in the Northwest Pacific despite the fact that the rig had not been winterized. ⁴¹

In 2015 Shell intends to use the Polar Pioneer to drill up to six wells together with the Noble Discoverer. A confidential source inside the industry informed the Greenpeace Investigations team that the day rate for the Polar Pioneer is \$623,000. Both units are intended to be in operation at the same time.

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1. <http://www.greenpeace.org.uk/taxonomy/term/5620>
2. <http://energydesk.greenpeace.org/2015/05/12/guest-post-a-history-of-screw-ups-and-its-own-plans-raise-doubts-about-the-ability-of-shell-to-safely-drill-in-the-arctic/>
3. <http://fuelfix.com/blog/2015/03/24/as-obama-administration-weighs-arctic-drilling-shell-moves-rigs-to-region/>
4. <http://www.alaskapublic.org/2015/07/17/shell-rigs-leave-dutch-for-chukchi-to-wait/>
5. <http://www.theguardian.com/environment/2015/aug/18/shell-gets-final-clearance-to-begin-drilling-for-oil-in-the-arctic>
6. <http://energydesk.greenpeace.org/2015/07/10/could-damage-to-shells-arctic-icebreaker-derail-the-firms-drilling-plans/>
7. <http://royaldutchshellplc.com/2015/06/23/shells-arctic-drilling-plans-may-hit-permitting-snag/>
8. <http://fuelfix.com/blog/2013/02/27/shell-calls-off-2013-arctic-drilling/#9184101=0>
9. Dept of Interior report: <https://www.doi.gov/sites/doi.gov/files/migrated/news/pressreleases/upload/Shell-report-3-8-13-Final.pdf> ; coast guard report into the ground of the Kulluk: <http://www.uscg.mil/hq/cg5/cg545/docs/documents/Kulluk.pdf>
10. <http://priceofoil.org/content/uploads/2015/02/2015-GP-Platform-OCI-Frozen-Frozen-Future.pdf>
11. Steven Mufson, 'Shell says it won't drill in Alaska in 2014, cites court challenge', The Washington Post, 30 January, 2014 http://www.washingtonpost.com/business/economy/shell-says-it-wont-drill-in-alaska-in-2014-cites-courtchallenge/2014/01/30/72dd06f8-89ab-11e3-916ee01534b1e132_story.htm
12. <http://www.upstreamonline.com/live/1386110/Noble-pleads-guilty-to-Arctic-violations>
13. <http://www.justice.gov/opa/pr/drilling-company-charged-environmental-and-maritime-crimes-alaska>
14. 2014 Integrated Operations Plan For the Chukchi Sea, Nov. 2013 http://www.boem.gov/uploadedFiles/BOEM/About_BOEM/BOEM_Regions/Alaska_Region/Leasing_and_Plans/Plans/2013-11-26_Shell_IOP.pdf
15. <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=1862>
16. BOEM 'Chukchi Sea Planning Area Oil and Gas Lease Sale 193 in the Chukchi Sea, Alaska Draft Second Supplemental Environmental Impact Statement.' October 2014 Volume 1. Chapters 1-6, p.154 http://www.boem.gov/uploadedFiles/BOEM/About_BOEM/BOEM_Regions/Alaska_Region/Leasing_and_Plans/Leasing/Lease_Sales/Sale_193/Lease_Sale_193_DraftSSEIS_vol1.pdf
17. <http://www.boem.gov/EP-PUBLIC-VERSION/>
18. <http://www.boem.gov/EP-PUBLIC-VERSION/>
19. <http://www.boem.gov/EP-PUBLIC-VERSION/>
20. <http://www.tiki-toki.com/timeline/entry/84063/Timeline-of-Shell-Blunders-in-Alaska/#vars!panel=3871501!>
21. <http://www.theguardian.com/environment/2015/feb/20/new-safety-rules-for-offshore-arctic-drilling>
22. <http://energydesk.greenpeace.org/2015/05/22/shells-arctic-exploration-safety-audit-kept-under-wraps/>
23. <http://www.ktuu.com/news/news/polar-pioneer-arrives-in-dutch-harbor-for-chukchi-sea-drilling/33819278>
24. <http://fuelfix.com/blog/2015/06/30/shells-arctic-drillship-heads-to-alaska/#28997101=0>
25. <http://fuelfix.com/blog/2015/06/30/obama-administration-delivers-big-blow-to-shells-arctic-drilling-plans/#33766101=0>
26. <http://energydesk.greenpeace.org/2015/07/10/could-damage-to-shells-arctic-icebreaker-derail-the-firms-drilling-plans/>

27. <http://www.greenpeace.org/usa/breaking-activists-stop-shell-vessel-as-it-attempts-to-leave-portland-harbor/>
28. <http://www.independent.co.uk/environment/climate-change/arctic-drilling-royal-dutch-shell-granted-final-permit-for-exploration-of-possible-oil-reserves-off-alaska-10459905.html>
29. <http://phx.corporate-ir.net/phoenix.zhtml?c=98046&p=irol-reportsOther>
30. <http://www.stuff.co.nz/taranaki-daily-news/news/4987045/Twinkle-twinkle-damaged-drillship> 31. <http://www.nytimes.com/2015/01/04/magazine/the-wreck-of-the-kulluk.html>
32. <http://www.noblecorp.com/rig-fleet/rig?rig=NDI>
33. <http://www.justice.gov/opa/pr/drilling-company-charged-environmental-and-maritime-crimes-alaska>
34. <http://www.stuff.co.nz/taranaki-daily-news/news/4987045/Twinkle-twinkle-damaged-drillship>
35. <http://articles.latimes.com/2012/dec/27/nation/la-na-nn-alaska-arctic-drilling-20121227>
36. <http://oilprice.com/Latest-Energy-News/World-News/BP-Halliburton-and-Transocean-Found-Negligent-in-DeepwaterHorizon-Spill.html>
37. Transocean, Owner Of Deepwater Horizon Oil Rig, Loses Round In Gulf Spill Document Fight 2013 http://www.huffingtonpost.com/2013/07/24/transocean-deepwater-horizon-documents_n_3644061.html
38. <http://www.deepwater.com/Documents/RigSpecs/Polar%20Pioneer.pdf>
39. <http://fuelfix.com/blog/2013/01/01/kulluk-drilling-rig-accident-stokes-fears-of-arctic-disaster/>
40. <http://kuow.org/post/coast-guard-blames-kulluk-grounding-shell-oils-complacency-risk-taking>
41. 2014 Integrated Operations Plan For the Chukchi Sea, Nov. 2013 http://www.boem.gov/uploadedFiles/BOEM/About_BOEM/BOEM_Regions/Alaska_Region/Leasing_and_Plans/Plans/2013-11-26_Shell_IOP.pdf

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The logo for Greenpeace, featuring the word "GREENPEACE" in a bold, green, sans-serif font. The letters are slightly irregular and have a hand-drawn appearance.