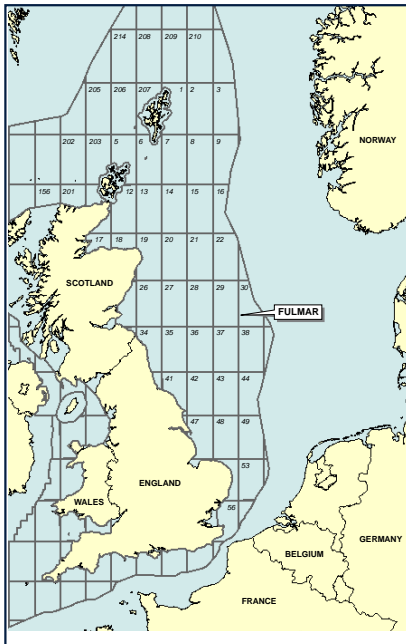


## FULMAR



Last Updated:

March 2019

The Fulmar platform was installed in 1981 with first oil production in 1982. The installation is located approximately 217 miles east of Dundee and comprises of two fixed steel jackets. It has facilities for production, accommodation and associated utilities – drilling facilities are long retired.

Cessation of production of the Fulmar, Halley and Auk North fields occurred on the 8<sup>th</sup> October 2018. The Fulmar facility has changed its operating model from that of a primary indigenous producer to a third party service provider. Oil from the Gannet, Auk, Clyde, Orion and Flyndre fields is transported via the Oil Export Module. Oil is exported from the Fulmar platform via the Norpipe system for onward delivery to the Teesside terminal.

The Fulmar platform has the facility to import gas via the Fulmar gas pipeline which runs to the St Fergus terminal. Gas compression is provided via the 'Borsig' compressor system. Gas export from the Orion and Flyndre fields is transported to the Fulmar platform and Clyde is exported to the SEGAL system.

**OPERATIONAL INFORMATION**

<b>Licence</b>	P.185 & P.256
<b>Licensees</b>	Repsol Sinopec North Sea Limited (Op) 100%
<b>Platform Type</b>	Fulmar A: Eight-leg fixed steel jacket Fulmar AD: Four-leg fixed steel jacket
<b>Platform Weight</b>	Fulmar A Topsides: 26,940 Tonnes Jacket: 12,400 Tonnes Total: 44,140 Tonnes  Fulmar AD Topsides: 260 Tonnes Jacket: 1,406 Tonnes Total: 1,666 Tonnes
<b>Drilling</b>	Fulmar A: 36 well slots Fulmar AD: 6 slots
<b>Wells</b>	Production: 23 Injection: 14
<b>Nearest Installations</b>	Auk: 12 km Clyde: 9 km

## CAPACITY PROJECTION

The platform process system is nominally designed for the following quantities:

Description	Unit	Max. Cap.	Projected Ullage (% of maximum capacity)				
			2019	2020	2021	2022	2023
Crude Oil Export	BPD	140,000	●	●	●	●	●
Gas Export Capacity	MMSCFD	100	●	●	●	●	●

Available Capacities:	●	> 25%
	●	5% to 25%
	●	< 5%

## PIPELINES

<b>Oil Export</b>	24-inch * 16km oil export pipeline to a 'Y' piece on the J-Block/Norpipe 24-inch pipeline  Oil is then routed via the Norpipe system to the Teesside Terminal
<b>Gas Export</b>	Gas is routed via the "SEGAL" system to the St. Fergus Terminal
<b>Gas Import / Export</b>	Gas can be imported or exported (depending on operating mode) via the 4.5" fuel gas pipeline, PL1316.

## ENTRY / EXIT SPECIFICATION

Given Fulmar indigenous production has now ceased, the below entry specifications no longer apply to the Fulmar asset. These are historical values which applied to Fulmar prior to 8th October 2018.

<b>Crude Mixture Entry</b>	Flowing Wellhead	up to 90°C up to 25 bara
<b>Crude Oil Export</b>	TVP (True Vapour Pressure)	2.3 barg @ 38°C
	Base Sediment & Water	0.2 % vol
	Salt	250 lb/Mbbl
	H2S	10 ppm wt
	Total Sulphur	0.35 % wt
	Nickel	10 ppm wt
	Vanadium	10 ppm wt
	Viscosity	40 cP @ 3°C
	pH	> 5
Mercury	0.15 ppb wt	
<b>Produced Water</b>		<30 ppm oil in water