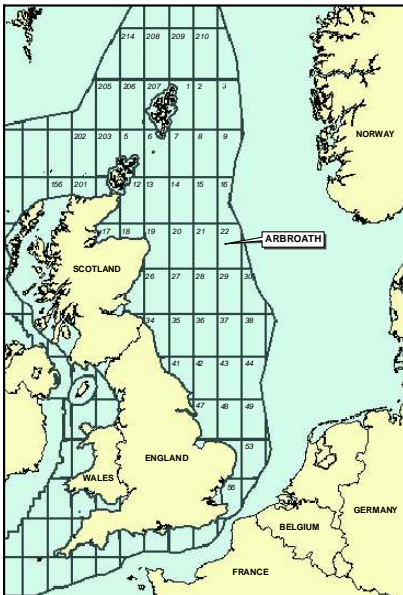


## ARBROATH



**Last Updated:**

**May 2017**

The Arbroath platform is a production platform located in Block 22/17s of the United Kingdom Continental Shelf. The platform stands in 92.7 m (304 ft) of water, approximately 210 km (130 miles) east of Aberdeen in the Central North Sea and is located at latitude 57° 22' 29.84" north, longitude 01° 22' 59.36" east.

The Arbroath platform was installed in 1989 and commenced production drilling from a cantilever jack-up rig positioned alongside the installation in early 1990, with production start-up following later in 1990. The Arbroath platform is supported by a conventional cross-braced steel jacket piled into the seabed above the Arbroath reservoir. Production is from the Palaeocene sandstone at a depth of approximately 8100ft TVDSS and Fulmar Jurassic formation at a depth of approximately 11000ft TVDSS.

The Godwin field is the latest tie back to the Arbroath platform (first oil July 2015). The Godwin field development is 1 extended reach platform well. There are two sub-sea manifolds and other installations in the vicinity of the Arbroath platform, including the Arkwright subsea development which is approximately 11.5 km (7.2 miles) south-south-east and the Brechin subsea development which is approximately 3.6 km (2.3 miles) east-south-east of the Arkwright manifold. The Montrose A platform lies 8 km (5 miles) to the north west of Arbroath and acts as a processing hub for the Montrose and Arbroath platforms.

## OPERATIONAL INFORMATION

<b>Licence</b>	P.019, P.020, P.291, P292
<b>Licensees</b>	Repsol Sinopec Resources UK Limited (Op) 58.974360% Marubeni Oil & Gas (U.K.) Limited 41.025640%
<b>Platform Type</b>	Tubular steel structure cross braced with a centre post. The tapered structure has four legs, each of which is supported by two piles driven into the seabed.
<b>Platform Weight</b>	Topsides: 3,225 Tonnes Jacket: 3,861 Tonnes
<b>Drilling</b>	Drilling Slot: 21
<b>Wells</b>	Production: 12 (including Godwin well) Injection: 0
<b>Nearest Installations</b>	Montrose: 5 miles north west Forties field: 35 miles north west

## CAPACITY AND ULLAGE PROJECTION

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

Description	Unit	Max. Cap.	Projected Ullage (% of maximum capacity)				
			2017*	2018	2019	2020	2021
Production Separator	BPD	50,000	●	●	●	●	●
Arkwright Separator	BPD	13,500	●	●	●	●	●
Water/Oil Export	BPD	46,000	●	●	●	●	●

No dedicated H<sub>2</sub>S facilities installed

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

\* Please note capacity and ullage projection does not reflect additional capacity resulting from the development of the Montrose BLP.

## PIPELINES

<b>Oil Export</b>	10-inch crude oil export pipeline to the Montrose platform
<b>Oil Import</b>	8-inch crude oil import pipeline from the Arkwright manifold
<b>Gas Export</b>	16-inch gas export pipeline to the Montrose platform
<b>Gas Import</b>	8-inch lift gas import pipeline from the Montrose platform
<b>Water Injection</b>	10-inch water injection import pipeline from the Montrose platform (not used)

## ENTRY SPECIFICATION

Subject to discussion and negotiation

## EXIT SPECIFICATION

<b>Oil Export</b>	No specification as processed on Montrose
<b>Gas Export</b>	No specification as processed on Montrose
<b>Produced Water</b>	No produced water as all fluids sent to Montrose