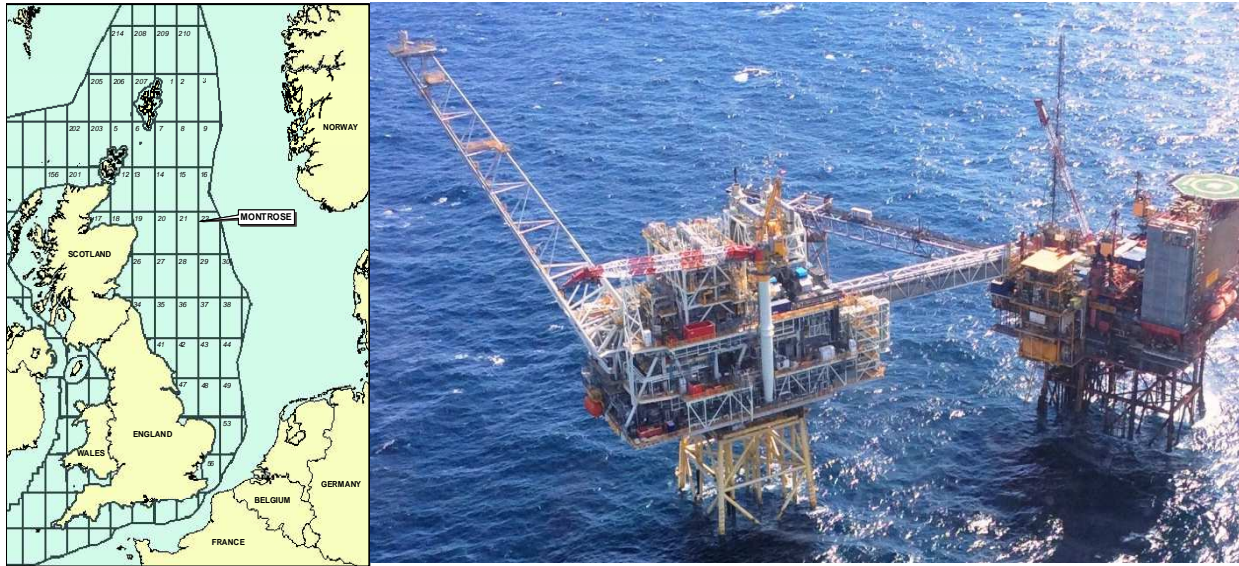


MONTROSE



Last Updated:

May 2017

The Montrose field lies in Blocks 22/17n and 22/18n of the United Kingdom Continental Shelf. The platform stands in approximately 91.4 m (300 ft) of water, approximately 207 km (130 miles) east of Aberdeen in the Central North Sea and is located at latitude 57°27'02.34" north, longitude 01°23'17.75" east.

The Montrose Alpha is a single steel jacket supported platform which was installed in 1975. Production drilling commenced in March 1976 and production start-up followed in June 1976. The oil lies in the Palaeocene Upper Forties sandstones, in gently anticlinal structures.

Montrose Alpha acts as a processing hub for the Montrose and Arbroath platforms. The Wood field is a subsea tie back directly to the Montrose platform; the Wood subsea manifold is approximately 10 km (6.3 miles) south-east of the Montrose platform. The Arbroath platform is located 8 km (5 miles) to the south-west of the Montrose platform.

A multi-billion dollar investment has been made in the MonArb area which involves the integration of established fields and related existing infrastructure with two undeveloped fields, Cayley and Shaw. The existing Montrose platform has undergone significant modifications including the development of a new Montrose Bridge Linked Platform (BLP) which was installed in Q2 2016. Cayley and Shaw fields are tied back to the BLP from where first hydrocarbons were exported in May 2017.

OPERATIONAL INFORMATION

Licence	P.019, P.020
Licensees	Repsol Sinopec Resources UK Limited (Op) 58.974360% Marubeni Oil & Gas (U.K.) Limited 41.025640%
Platform Type	Eight- leg fixed steel jacket
Platform Weight	Topsides: 10,255 Tonnes Jacket: 10,921 Tonnes
Drilling	Drilling Slots: 24
Wells	Production: 1 Injection: 0
Nearest Installations	Arbroath: 5 miles south west Forties field: 30 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
1 st Stage Separator	BPD	30,000	●	●	●	●	●
2 nd Stage Separator	BPD	30,000	●	●	●	●	●
Oil Export	BPD	45,000	●	●	●	●	●
Produced Water Treatment (2)	BPD	20,000	●	●	●	●	●
LP Compressor – WaGE (1)	MMscfd	17.5	●	●	●	●	●
IP Compressor – WaGE (1)	MMscfd	17.5	●	●	●	●	●
HP Compressor – Export-WaGE (1)	MMscfd	31	●	●	●	●	●
LP Compressor – BLP	MMscfd	53	●	●	●	●	●
MP Compressor – BLP	MMscfd	101	●	●	●	●	●
HP Compressor – BLP	MMscfd	126	●	●	●	●	●
Export Compression – BLP	MMscfd	83	●	●	●	●	●

No dedicated H₂S facilities installed

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

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

- (1) BLP compression becomes primary unit. WaGE will be mothballed by the end of 2017
- (2) Assumes produced water capacity improves by 2019

PIPELINES

Oil Export	14-inch oil export to Forties Charlie platform. Oil is then routed via the Forties Pipeline System to Kinneil (Via Cruden Bay)
Water Injection	10-inch water injection to Arbroath platform (not used)
Gas Export	6-inch Gas Export to CATS System

ENTRY SPECIFICATION

Subject to discussion and negotiation

EXIT SPECIFICATION

Oil Export	Set by Forties Pipeline System entry requirements
Gas Export	Set by CATS entry requirements
Produced Water	<30 ppm oil in water