



Last Updated:

March 2011

The 'Bleo Holm' is a Floating Production, Storage and Offloading Facility ("FPSO") registered in Willemstad, The Dutch Antilles. It is considered to be a fixed installation, as defined in Regulation 1 of SI 2885 "Offshore Installation (Safety Case) Regulations, 1992. The FPSO is based on a purpose built tanker mono hull which was constructed at Hitachi Yard in Japan. The vessel has a double hull construction and weighs 105,000 dead weight tonnes. Located in a water depth of 110m (360 ft) at coordinates 58°27'N, 01°26'W in block 13/28a on the UKCS, 72 miles (116km) North East of Aberdeen.

The FPSO processes oil and gas from the Talisman operated Ross field and the BG operated Blake field.

#### OPERATIONAL INFORMATION

<b>Licence</b>	P.297, P.973 and P.307	
<b>Licensees</b>	Talisman Energy (UK) Limited (Op)	56.180000%
	Talisman Energy Alpha Limited	13.000000%
	Idemitsu Petroleum UK Ltd	30.820000%
<b>Dimensions</b>	214m L x 42m B x 21.2m D	
<b>Owner</b>	Bluewater (Floating Production) Limited	
<b>Weight</b>	105,000 DWT	
<b>Storage</b>	117,200 tonnes	
<b>Wells</b>	Production	13
	Injection	8



**CAPACITY PROJECTION**

The FPSO process system is nominally designed for the following quantities. However, peak flow rates may exceed these values based on analysis of the production profiles and the actual equipment capacities at that time:

Description	Unit	Max. Cap.	Projected Ullage (% of maximum capacity)					
			2011	2012	2013	2014	2015	2016
Test Separator	BPD	40,000	●	●	●	●	●	●
Production Separator	BPD	100,000	●	●	●	●	●	●
2 <sup>nd</sup> stage Separator	BPD	74,000	●	●	●	●	●	●
Oil Export	BPD	74,000	●	●	●	●	●	●
Produced Water Treatment	BPD	130,000	●	●	●	●	●	●
Water Injection	BPD	140,000	●	●	●	●	●	●
MP Compressor	MMscfd	63	●	●	●	●	●	●
HP Compressor	MMscfd	58	●	●	●	●	●	●
Dehydration	MMscfd	58	●	●	●	●	●	●

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



## PROCESSING

Well fluids arrive on the Bleo Holm through subsea manifolds, flowlines and risers, then the turret piping and swivel. They are then routed to the crude separation area for onward processing as stated below.

Wet oil from the first stage separators is passed to the second stage separator together with recovered condensate and oil reject oil from the produced water hydroclones. The combination of temperature and pressure in the second stage separator ensures that the hydrocarbon liquids are stabilised to a low Reid Vapour Pressure (RVP) suitable for storage and shipment. The crude oil from this separator is then pumped to the storage tanks.

Produced water from the three separators is treated to reduce the oil-in water content before discharge overboard.

Gas from the production and test separators is cooled and fed to the 3-stage compression train. Before the inlet to the third stage, the gas is dehydrated by glycol contacting. Gas from the MP compressors (2<sup>nd</sup> stage discharge) can be used for fuel. Gas from the HP compressor is used for lift with any excess exported by pipeline.



**TALISMAN**  
E N E R G Y  
**B L E O H O L M**

**PIPELINES**

<b>Oil Export</b>	N/A (oil offloaded by shuttle tanker)
<b>Gas Export</b>	6" * 24 km hot tapped to Frigg UK system Onward transport to St. Fergus

**ENTRY SPECIFICATION**

Subject to discussion and negotiation

**EXIT SPECIFICATION**

<b>Crude Oil Export</b>	Tanker offload
<b>Gas Export</b>	Set by Frigg pipeline entry requirements
<b>Produced Water</b>	<30 ppm oil in water regulation <30 ppm oil in water design