



Last Updated:

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The Flotta Terminal is located on the island of Flotta in the Orkney islands just North of mainland Scotland. It was commissioned in 1977, with Talisman Energy (UK) Limited becoming the major shareholder and operator in May 2000. The terminal covers a 395-acre site, approximately one sixth of the area of Flotta Island.

Crude oil is imported to the Flotta Oil Terminal from several offshore installations through a 30" subsea pipeline. The pipeline is fed from fields in the Northern Business Area (NBA) including Talisman operated Claymore, Piper 'B', Tartan, Saltire and Galley and ConocoPhillips operated MacCulloch field.

OPERATIONAL INFORMATION

Licensees	Talisman Energy (UK) Limited (Op)	20.2770%
	Talisman North Sea Limited	16.6670%
	Talisman Energy Alpha Limited	19.5560%
	Transworld Petroleum (U.K.) Limited	23.5000%
	Eni UK Limited	20.0000%
Location	Flotta Island, Orkney Islands 16km South West of Kirkwall	
Area	395 acres	
Coordinates	58°20'22" N 03°06'24" W (at flare stack)	
Facility Type	Crude oil storage and processing terminal	
Commissioned	1977	
Tanker Frequency	Approx. 33 Crude per year	



Steel Piled Jetty

Crude oil import/export, propane export

Tanker size 150,000 dw tonnes

Loading rates 80,000 BPH (max) crude oil
5,000 BPH propane

Single Point Mooring

Crude oil export

Tanker size 200,000 dw tonnes

Loading rate 50,000 BPH

CAPACITY PROJECTION

Pipeline Crude Processing

Capacity available in pipeline and process plant

Description	Projected ullage (% of maximum capacity)				
	2011	2012	2013	2014	2015
Oil	●	●	●	●	●

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



PRIMARY SEPARATION PROCESSING FACILITIES

The crude oil processing facilities consist of three separate crude stabilisation trains operating in parallel. This allows a design maximum plant flowrate of 375,000 bbl/d to be processed between the three trains.

The main systems which make up each crude stabilisation train are as follows: First Stage Desalting, Second Stage Desalting, Stabilisation and Stabiliser Side-Draw system.

The stabilised crude is then transferred to the Crude Oil Storage area with the Desalter wash water transferred to the Desalter Water Treatment plant.

GAS TREATMENT FACILITIES

The purpose of the gas processing facilities is to remove the lighter, more volatile hydrocarbons from the crude oil. The gas processing plant is designed to recover propane from both the Stabiliser side-draw and the Stabiliser overhead vapours. The separation of propane and ethane/propane mix is achieved in a fractionation train, consisting essentially of Demethaniser, Deethaniser and Depropaniser.

The LPG Plant is designed to recover 6,000 bbl/d propane. Propane product is passed through a molecular sieve before being transferred to a single Propane Storage tank. The Methane/Ethane gas is used for the Terminal Heaters and Turbines, with the extra gas used for Power Export which is fed into the National Grid.

PIPELINES

Oil Import
(Capacity limited by process plant)

30" * 210 km subsea from Flotta Catchment Area
(includes Galley, MacCulloch, Piper 'B', Saltire, Claymore, Tartan)



ENTRY / EXIT SPECIFICATION

Typical Pipeline Entry Specification

API Gravity	30 to 40
Water	2 % vol
Base Sediment	0.05 % vol
Viscosity @ 25°C	10 cP
Pour Point	-3 °C
Wax Content	6 % wt
TVP @ 100°F	120 psia
Total Sulphur	1 % wt
H2S	1 ppm wt
CO2	0.25 % mol
Total Acid Number	0.05 mg KOH/g
Nickel	4 ppm wt
Vanadium	8 ppm wt
Mercury	0.35 ppb wt

Typical Flotta Blend Specification: – Stabilised Crude Oil

Density at 15°C	838.8 kg/m ³
API Gravity	37.1
Total Sulphur	0.92 % wt
Total Salts	2.0 lb NaCl / 1000 bbl
Water Content	0.04 % wt
RVP	10.7 psig