TALISMAN ENERGY

TARTAN ALPHA

Last Updated: February 2011

The Tartan 'A' platform is located in block 15/16 of the United Kingdom Continental Shelf 187 km north east of Aberdeen in 138 m of water. The location co-ordinates are 58°21'11"N, 00°04'25" E. The platform comprises a four-legged K-braced steel jacket supporting process, utilities drilling and accommodation modules via a module support frame (MSF). The jacket is fixed to the seabed by an array of 28 piles, was installed in 1979 and first production achieved from the Tartan field in January 1981. The Tartan field is developed with a mixture of platform-drilled and subsea-wells tied back to the platform. The Highlander field was developed as a subsea tie-back to the platform in 1985 followed by the Petronella Field in 1986. Oil and gas from the Galley Field were tied-in to Tartan infrastructure in 1998 and then reconfigured as a full sub-sea tied-back in 2007. The Duart Field was developed as a subsea tie-back also in 2007.

OPERATIONAL INFORMATION

Licence	P.237	
Licensees	Talisman Energy (UK) Limited (Op) Talisman Oil Trading Limited	 100.000%
Platform Type	Four-legged steel jacket supporting process with MSF supporting utilities drilling and accommodation modules.	
Platform Weight	Topside	14,100 Tonnes
	Jacket	14,400 Tonnes
	TOTAL	28,500 Tonnes
Active Tartan Wells	Production	5 platform
	Injection	1 platform & 1 subsea
Drilling	Total of 32 drilling slots (8 x 4)	13 in well use
		17 for risers, caissons etc
		2 free
Nearest Installations	Claymore	27 km NW
	Piper 'B'	18 km NE
	Saltire	24 km ENE
	Scott	13 km SE
Associated Fields	Duart	Single well subsea-back
	Galley	Subsea tie-back
	Highlander	Subsea tie-back
	Petronella	Single well subsea tie-back
	Tartan North Terrace (TNT)	Single well subsea tie-back

CAPACITY PROJECTION

The platform 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 Capacity	Projected ullage (% of maximum capacity)				
			2011	2012	2013	2014	2015
Oil Export	STBD	24,000	●	●	●	●	●
Produced Water Treatment	BPD	126,000	●	●	●	●	●
Water Injection	BPD	113,500	●	●	●	●	●
ST compressor stage 1	MMscfd	14	●	●	●	●	●
ST compressor stage 2	MMscfd	45	●	●	●	●	●
LP compressor stage 1	MMscfd	66	●	●	●	●	●
LP compressor stage 2	MMscfd	55	●	●	●	●	●
IP gas compressor	MMscfd	36	○	○	○	○	○
Sweetening	MMscfd	75	●	●	●	●	●
Dehydration	MMscfd	75	●	●	●	●	●

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

PRIMARY SEPARATION PROCESSING FACILITIES

Reservoir fluids from Tartan and tied-back fields (Highlander, Petronella, Galley, TNT & Duart) are processed with a total of six horizontal separators configured with five 1st stage vessels and a single 2nd stage vessel. All but one of the separators are three phase units (gas, oil and water) with oil ultimately pumped through metering streams into the export pipeline. Produced water is treated in a degassing vessel and hydrocyclones package before being discharged overboard.

GAS TREATMENT FACILITIES

Gas from the production separators is compressed using a single 5-stage compression train and treated to remove H_2S, CO_2 and H_2O prior to export/injection. The gas is either used as lift gas or is metered and exported. NGL recovered from gas compression is treated to remove H_2S prior to export via the crude oil pipeline. Gas can also be imported from the gas line.

PIPELINES

Oil Export	24" * 27km to Claymore Onward transport to Flotta
Gas Export	18" * 72km to MCP01 Onwards transport to St Fergus
Galley – Tartan	8" 22km Oil Import from Galley 8" 22km Gas Import from Galley
Petronella – Tartan	8" * 10.5km Multiphase Import from Petronella 8" * 10.5km Gas Lift to Petronella
Highlander - Tartan	12" * 13km Multiphase Import from Highlander 8" * 13km Gas Lift to Highlander
TNT Well - Tartan	6" * 3.4km Multiphase Import from TNT 3" * 3.4km Gas Lift to TNT

ENTRY SPECIFICATION

Subject to discussion and negotiation

EXIT SPECIFICATION

Crude Oil Export (Set by Flotta pipeline)	TVP	9.3 bara @ 29.4°C
	H2S	10 ppm
	CO2	0.3 % mol
	Base Sediment/Water	5 % vol
Gas Export (Set by Frigg pipeline)	Set by St Fergus entry requirements	
Produced Water (Prevention of Oil Pollution Act 1971)	< 30 mg/L oil in water	