Infrastructure Code of Practice (ICOP) - Access to Upstream Oil and Gas Infrastructure on the UK Continental Shelf

Name of Infrastructure :	Perenco Dimlington Terminal	Last Updated:	June 2014

Entry Specification :	O2	<u>≤</u> 1.0mol%	Wobbe	47.2-41.41MJ/m ³
	CO2	<u>≤</u> 2.0mol%	Temperature	1-36°C
	H2S	<3.3ppm	H2O	~1bbl/mmscf
	S	<35ppm	Gross CV	<u>≤</u> 42.25MJ/m³

Gas Purity:	Gas shall be commercially free from objectionable odours and materials, and dust or other solid or liquid matter, waxes, gums and
	gum forming constituents, which might damage or adversely affect operation of the Perenco Dimlington Terminal & National
	Grid

Exit Specification: Sales Specification of National Grid Transco	
Outline Details of primary separation processing facilities :	Slug catchers and separation with Refrigeration dewpoint reduction for hydrocarbons and
	water

CAPACITY INFORMATION KEY

Key Colour	Ullage as % of System
-	Capacity
Red	<5%
Amber	5% to <25%
Green	>25%

AVAILABLE CAPACITY

	Daily Capacity (including units)				
		2014	2015	2016	2017
Gas Treatment Capacity:	600 mmscf				
Condensate Stabilisation Capacity:	528m³				

No interruptible capacity is available

For further enquiries regarding the above please contact Andrew Sanders, Commercial Manager, Perenco UK Limited, 1 Franklins Row, London SW3 4SW

E-mail: <u>asanders@uk.perenco.com</u>

Telephone: 020 7368 9250

Disclaimer

Name of Infrastructure :	Cleeton		Last Updated:	June 2014
		<u>-</u>		

Entry Specification:	O2	<u>≤</u> 1.0mol%	Wobbe	36.0-52.2MJ/m ³
	CO2	<2.0mol%	Temperature	33-100°F
	H2S	<1.0ppm	H2O	~1bbl/mmscf
	S	<15ppm	Gross CV	<u>≤</u> 42.3MJ/m³

Ī	Gas Purity :	Gas shall be commercially free from objectionable odours and materials, and dust or other solid or liquid matter, waxes, gums and
		gum forming constituents, which might damage or adversely affect operation of the Perenco Dimlington Terminal & National
		Grid

Outline Details of primary separation processing facilities :	Slug catchers to coalescers, to single state Compression Station, Fiscal Metering, Condensate
	Reinjection, produced water re-injection down single well, Export Pipeline to Dimlington
Outline Details of gas treatment facilities :	Slug catchers and separation with Refrigeration dewpoint reduction for hydrocarbons and
	water

Key Colour	Ullage as % of System
	Capacity
Red	<5%
Amber	5% to <25%
Green	>25%

AVAILABLE CAPACITY

	Daily Capacity (including units)				
		2014	2015	2016	2017
Gas Pipeline Export Capacity:	700 mmscf				
Gas Compression Capacity:	450 mmscf				
Gas Dehydration Capacity (@ 36Barg):	220 mmscf				

No interruptible capacity is available

For further enquiries regarding the above please contact Andrew Sanders, Commercial Manager, Perenco UK Limited, 1 Franklins Row, London SW3 4SW

E-mail: asanders@uk.perenco.com

Telephone: 020 7368 9250

Disclaimer

Name of Infrastructure :	Ravenspurn North	Last U	Jpdated:	June 2014
		· · · · · · · · · · · · · · · · · · ·		

Entry Specification:	O2	<u>≤</u> 1.0mol%	Wobbe	1272-1351btu/cf
	CO2	<u><</u> 2.0mol%	Temperature	33-100°F
	H2S	<3.3ppm	H2O	~1bbl/mmscf
	S	<35ppm	Gross CV	973-1115btu/cf

Gas Purity :	Gas shall be commercially free from objectionable odours and materials, and dust or other solid or liquid matter, waxes, gums and
	gum forming constituents, which might damage or adversely affect operation of the Perenco Dimlington Terminal & National Grid

Outline Details of primary separation processing facilities :	3 phase slug-catchers (ST1, ST-2 &JN) & production separator (RN WT1), combined flow to			
	production coalescer then to 1st stage compressor suction scrubber. JN flow stream passes			
	through a gas metering skid prior to entering into combined ST & RN gas stream.			
Outline Details of gas treatment facilities :	1 x Nuovo Pignone Gas Compression Skid (GE 7 LM2500 series driver), 2 stage (LP/HP) gas			
	compressor with 1st & 2nd stage suction scrubbers, seawater cooled intercooler and export			
	cooler. Cooled export gas passes into a TEG gas dehydration contactor and finally through			
	the RN gas metering skid, prior to discharging into a 24" export pipeline to Cleeton.			

Key Colour	Ullage as % of System
	Capacity
Red	<5%
Amber	5% to <25%
Green	>25%

AVAILABLE CAPACITY

	Daily Capacity (including units)				
		2014	2015	2016	2017
Gas Treatment Capacity:	380 mmscf				
Condensate Stabilisation Capacity:	112.6 mmscf				

No interruptible capacity is available

For further enquiries regarding the above please contact Andrew Sanders, Commercial Manager, Perenco UK Limited, 1 Franklins Row, London SW3 4SW

E-mail: <u>asanders@uk.perenco.com</u>

Telephone: 020 7368 9250

Disclaimer

Name of Infrastructure : West Sole	Last Updated:	June 2014
------------------------------------	---------------	-----------

Entry Specification:	O2	<u>≤</u> 1.0mol%	Wobbe	47.2-51.41MJ/m ³
	CO2	<u><</u> 2.0mol%	Temperature 1-38°C	
	H2S	<3.3ppm	H2O	~1bbl/mmscf
	S	<35ppm	Gross CV	36.87-42.25MJ/m ³

Gas Purity :	Gas shall be commercially free from objectionable odours and materials, and dust or other solid or liquid matter, waxes, gums and
	gum forming constituents, which might damage or adversely affect operation of the Perenco Dimlington Terminal & National
	Grid

Outline Details of primary separation processing facilities	3 Phase Separation, Gas, Condensate, water, West sole/Seven Seas/Newsham Metering,		
	Export Pipeline to Easington		
Outline Details of gas treatment facilities :	No gas treatment, corrosion inhibitor to infrastructure		

Key Colour	Ullage as % of System
	Capacity
Red	<5%
Amber	5% to <25%
Green	>25%

AVAILABLE CAPACITY

	Daily Capacity (including units)				
		2014	2015	2016	2017
Gas Treatment Capacity:	400 mmscf				
Condensate Stabilisation Capacity:	300 mmscf				

No interruptible capacity is available

For further enquiries regarding the above please contact Andrew Sanders, Commercial Manager, Perenco UK Limited, 1 Franklins Row, London SW3 4SW

E-mail: <u>asanders@uk.perenco.com</u>

Telephone: 020 7368 9250

Disclaimer

Name of Infrastructure : Amethyst	Last Updated:	June 2014
-----------------------------------	---------------	-----------

Entry Specification:	O2	<u>≤</u> 1.0mol%	Wobbe	47.2-51.41MJ/m ³	
	CO2	<u><</u> 2.0mol%	Temperature	1-38°C	
	H2S	<3.3ppm	H2O	~1bbl/mmscf	
	S	<35ppm	Gross CV	36.87-42.25MJ/m ³	

Gas Purity :	Gas shall be commercially free from objectionable odours and materials, and dust or other solid or liquid matter, waxes, gums and
	gum forming constituents, which might damage or adversely affect operation of the Perenco Dimlington Terminal & National
	Grid

Outline Details of primary separation processing facilities :	3 Phase Separation, Gas, Condensate, water, West sole/Seven Seas/Newsham Metering,		
	Export Pipeline to Dimlington		
Outline Details of gas treatment facilities :	No gas treatment, corrosion inhibitor to infrastructure		

Key Colour	Ullage as % of System		
	Capacity		
Red	<5%		
Amber	5% to <25%		
Green	>25%		

AVAILABLE CAPACITY

	Daily Capacity (including units)				
		2014	2015	2016	2017
Gas Treatment Capacity:	300 mmscf				
Condensate Stabilisation Capacity:	120 mmscf				

No interruptible capacity is available

For further enquiries regarding the above please contact Andrew Sanders, Commercial Manager, Perenco UK Limited, 1 Franklins Row, London SW3 4SW

E-mail: <u>asanders@uk.perenco.com</u>

Telephone: 020 7368 9250

Disclaimer