



GAS FORM C

Main particulars

2.1 PREAMBLE

Ship's name	BW PRINCE
Owners	BW Prince Limited
Flag - Registry	NORWEGIAN (NIS)
Builder	HHI (Hyundai Heavy Industries, Ulsan, Korea)
Delivery	16 th November 2007, Ulsan South Korea
Class	DNV
Class notation	+1A1 Tanker for Liquefied Gas OPP-F E0 NAUT-OC PLUS-1 TMON NAUTICUS, 2G (-50°C, 610 kg/m ³ , 0,275 bar
IMO No.	9350422

GRT/NRT	
International	47194 / 15954
Suez	50531,96 / 45507,59
Panama	NA

2.2 HULL

	Metres
LOA	225,29 mtrs
LBP	215,00 mtrs
Breadth	36,60 mtrs
Depth	22,00 mtrs
Keel to highest point	47,695 mtrs

Max summer draft	12,024 M	Corresponding deadweight	54368 MT
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TPC fully loaded	70,65
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Mean draft with full bunkers and full cargo		
Specific Gravity	Mean draft	Corresponding DW
0.581	11,52 mtrs	51235 mt
0.596	11,69 mtrs	52446 mt
0.680	N/A	N/A
0.703	N/A	N/A



LPG/C "BW PRINCE"

Communication equipment	
International call sign	LADQ7
Radio station	GMDSS
Inmarsat F -77	
- Telephone	764683483
- Telefax	764683487
- Telex	
Inmarsat C	425970810 / 11
MMSI	259 708 000
Cell phone	+4795265261
E-mail	bw.prince@bwgas.com

2.3 MACHINERY

Main Engine	
MAN B&W Hyundai	
Max Cont.	13560 kW at 105 rpm
Grade fuel used	IFO 380 cst

Auxiliaries	
Diesel	3 pcs
Make	MAN B&W Hyundai
kW/RPM	1200 kW / 720 rpm
Grade fuel used	IFO 380 cst

Speed/Consumption*	
Guaranteed average loaded/ballast speed over 12 months	
Average consumption on Main Engine guaranteed speed	
Average consumption on auxiliaries	

*) Above based on 50/50 propane/butane and max force 5 Beaufort

Slow speed/consumption figures as guidance only	
Average loaded/ballast	Consumption
13 Knots	
14 Knots	
15 Knots	

Average consumption in port. (HFO/MDO/GASOIL)	
Inert gas plant when operating	
Boiler consumption	

Permanent bunkers capacity (Excl. daily service tanks)		
HFO	3375,4 m ³ (100 %)	3046,3 mt with sp.gr. 0.95 (95 %)
GAS OIL	319,9 m ³ (100 %)	246,2 mt with sp.gr. 0.81 (95 %)



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2.4 CARGO INSTALLATION

Tank No.	100 % M ³	98 % M ³	Butane 0.596 -2°C MT	Propane 0.581 -41.5°C MT	NH ₃ 0.680 -32°C MT	Butadiene 0.651 -5°C MT	Naphtha 0.703 30°C MT	Naphtha 0.676 30°C MT
1	17956,4	17597,3	10488	10224	N/A	N/A	N/A	N/A
2	21847,3	21410,4	12761	12439	N/A	N/A	N/A	N/A
3	21862,8	21425,5	12769	12448	N/A	N/A	N/A	N/A
4	20716,4	20302,0	12100	11796	N/A	N/A	N/A	N/A
Total	82382,9	80735,2	48118	46907	N/A	N/A	N/A	N/A
Decktank capacity					402,5 cubm.			
Transportable products and respective quantities								
<i>Other transportable products:</i>								

Scantlings of the cargo tanks are based on a maximum density of cargo of kg/m^3 . Cargo with density up to kg/m^3 may be carried in the cargo tanks on the following conditions:

For density of kg/m^3	N/A
For densities between and kg/m^3	N/A

Tank working pressure	
Maximum pressure	0,400 barg (port)/0,275 (sea)
Minimum pressure	-0,05 barg
Minimum temperature acceptable in tanks	-50 °C

Loading rate - tons/hour	2500 mt on two loading arms
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2.5 CARGO PUMPS

Number and type	600 m ³ /hat 140 mlc Svanehøj,
Location	Deepwell pumps, 2 for each cargotank,
Max permissible specific gravity	0,610
Time for discharging full cargo using all pumps against no backpressure	18 hrs
Cargo remaining onboard in cargo tanks after completion pumping	Total approx 60 m ³ (all cargotanks)
Total head when working in series with booster pump	230 mlc
Booster pumps	600 m ³ /h at 115 mlc

2.6 CARGO COMPRESSORS

Number and type	4 x Burckhardt Compression 3K140-3A
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	Propane	Ammonia
Refrigeration Capacity	(2,5 % Ethane) 4 x 194000 kcal/h	N/A
Suction pressure	0,200 bar	N/A



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2.7 INERT GAS SYSTEM

Does the vessel use inert gas?	Yes
Utilization	

Does the vessel produce inert gas?	Yes
Type	Inert Gas
Daily production	127200 m ³

Composition of inert gas	
Carbon dioxide	14 %
Oxygen max.	1 %
Carbon monoxide max.	%
Hydrogen max.	%
Nitrogen	85 %
Soot	Bacharach 0
Sulphur oxides max.	1ppm
Dewpoint	-40 °C

State if any shore supply of liquid nitrogen may be required	N/A
What quantity?	

2.8 GAS FREEING

Can this operation be carried out at sea?	Yes
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State method incl. all details	
For LPG – Boil off/heating	24 hrs/36 hrs - for propane/butane
Inerting	36 hrs
Ventilating for entry	36 hrs
For NH ₃	N/A

Advise time required and consumption of inert gas if any	
From LPG about	36 hrs, 190 000 m ³
From NH ₃ about	N/A

Is the vessel equipped with inert gas blower?	Yes
Capacity	5300 m ³ /hrs

Ventilation fan	2 x 10000 m ³ /hrs
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2.9 CHANGING GRADE

Can this operation be carried out at sea?	LPG to NH ₃	N/A
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State method used and time required for changing from NH₃ to LPG and vice versa, to reach 50 ppm of previous cargo in tanks atmosphere, the tanks being dry and free of moisture (dewpoint plus 10 °C)

From NH ₃ to LPG	N/A
Time required	N/A

From LPG to NH ₃	N/A
Time required	N/A



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Can vessel reduce in tank atmosphere and gas installation concentration of previous cargo below 50 ppm?	Yes
Method used, time required and extra shore supply if any	Boil off/heating/inerting/venting
How can it be checked that no liquid gas remain onboard	Level Gauge / Temperature

2.10 CARGO HEATER

State discharging rate for propane with 2.5 mol % ethane to be brought from -44°C to -5°C at sea temperature of 15°C	600 m ³ /h
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2.11 CARGO VAPORIZER

In case of need of vapour gas during discharge, can vessel produce its own if no shore gas available?	Yes
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2.12 REFRIGERATING APPARATUS

Is it independent of cargo?	Yes
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2.13 MEASURING APPARATUS

What gauges onboard	Kongsberg Radar
Location and type	2 for each cargotank
Number of temperature sensors/gauges pr tank	7 – 3 each side and 1 in vapour dome
Number of pressure sensors/gauges pr tank	1 in each tank

2.14 SAMPLES

Where can samples be taken?	Vapour – Dome / Liquid – Dome (Cargo Pump)
Are sample bottles available onboard?	Yes

2.15 CARGO LINES

(See also last page of this gas form C)

Distance from manifold to bow	109,28 m
Distance from manifold to stern	116,01 m
Height cargo manifold above main deck	1,625 m
Height above drip tray manifold deck	1,24 m
Height cargo manifold above Summer Draft mark	11,39 m
Height cargo manifold above waterline when in ballast	16,60 m
Height cargo manifold above waterline when loaded (gas)	12,22 m
Distance manifold from ship's rail	3,22 m
Distance between loading and vapour return connections	2,25 m
Windage area in normal ballast condition	3946 m ²
Is vessel fitted with SPM chainstopper,suitable for 76 mm chain.	Yes
Is vessel fitted with cruziform bollards/fairleads/eye-pads in manifold area.	Yes



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Dimension of lines		
	Diameter	Flange size
Liquid	350 mm	" ASA 300
Vapour	250 mm	" ASA 150
Booster	350 mm	" ASA 300

What reducers onboard			
Number	Diameter	Length	Pressure rating
2	14"-16"	64,5 cm	ASA 300
2	14"-12"	60,5 cm	ASA 300
2	14"-10"	59,5 cm	ASA 300
2	14"- 8"	59,5 cm	ASA 300
2	14"-16"	62,0 cm	ASA 300 - ASA 150
2	14"-14"	50,0 cm	ASA 300 – ASA 150
2	14"-12"	59,0 cm	ASA 300 – ASA 150
2	14"-10"	58,5 cm	ASA 300 – ASA 150
2	14"- 8"	59,0 cm	ASA 300 – ASA 150
2	12"- 10"	50,0 cm	ASA 150
2	10"- 8"	50,0 cm	ASA 150
2	10"- 6"	50,0 cm	ASA 150
1	8"- 12"	50,0 cm	ASA 150
1	8"- 10"	50,0 cm	ASA 150
1	8"- 8"	50,0 cm	ASA 150
1	6"- 8"	50,0 cm	ASA 150

2.16 LIFTING DEVICE

Where situated	Aft	Amidship
Number and type	2	1
Lifting capacity	5 tons	10 tons
Max. distance from ship's side of lifting hook	Port 4,0 mtrs Stb. 6,0 mtrs	6,2 mtrs

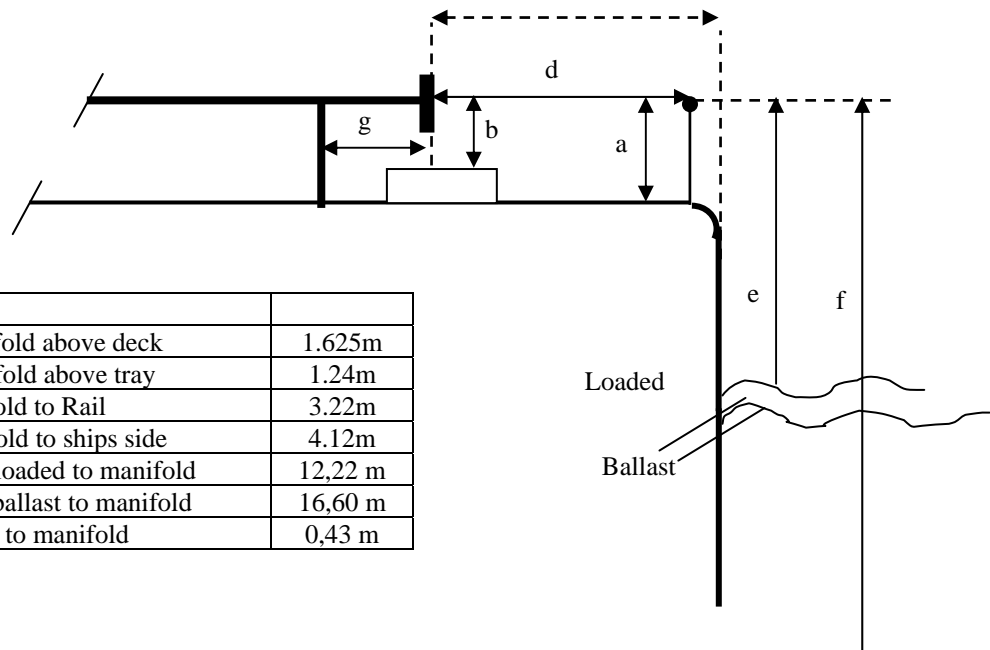
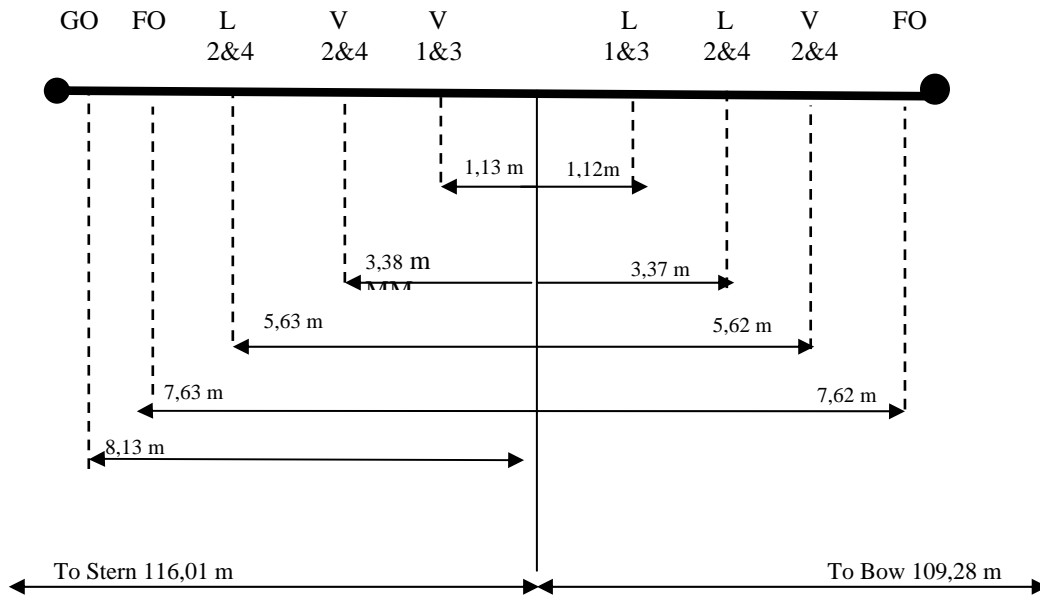
2.17 SPECIAL FACILITIES

How many grades can vessel segregate?	2
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Indicate systems	(1+3) & (2+4) or (1+3+4) & (2)
Is vessel able to load/discharge two or more grades simultaneously?	Yes
Can vessel sail with slack tanks?	Yes
Is vessel fitted with purge tank?	Yes



ARRANGEMENT OF CARGO MANIFOLD



a) Height of manifold above deck	1.625m
b) Height of manifold above tray	1.24m
c) Distance manifold to Rail	3.22m
d) Distance manifold to ships side	4.12m
e) Dist. waterline loaded to manifold	12,22 m
f) Dist. waterline ballast to manifold	16,60 m
g) Dist. 1 st stander to manifold	0,43 m

PARALLEL BODY LENGTH

LOADED CONDITION

