

GAS FORM "C"

1.0 GENERAL

Name of ship:	Gas Houston
Registered Owner:	Petroxi Trading Inc. Istanbul / Turkey
Flag:	Panama
Port of registry:	Panama City
Delivery date:	7 May 1999
Yard:	Hyundai Heavy Industries, Korea
Speed:	± 13.5 knots (at a wind force up to and including bf 4)
Maximum range:	abt. 10,000 n.miles
Maximum fresh water capacity:	67.8 mton
Maximum ballast capacity:	1,437.8 mton
Class:	Lloyd's Register
Class notation:	100A1, Liquefied Gas Carrier, Ship type 2PG, LPG in Independent Tanks Type C, Maximum S.G. 0.97, Maximum Vapour Pressure 7.00 bar, Minimum Temperature Minus 48 C, Ice Class 1B FS at Draft 7.24 m
Ice Class:	1B FS
IMO/LR no:	9181900
USCG compliance:	yes

2.0 HULL

GRT/NRT International:	4693/1754 ton
GRT/NRT Suez:	5349/4442 ton
GRT/NRT Panama:	4003/1754 ton
LOA:	106.98 m.
LBP:	98.40 m.
Breadth:	15.70 m.
Depth:	8.25 m.
Tropical draft/total deadweight:	
Summer (LPG) draft/total deadweight:	6.56 m./4999 mton
Summer (VCM) draft/total deadweight:	
Winter draft/total deadweight:	
Air draft when in ballast:	27.95 m.
Lightship displacement:	3056.7 ton
Bow thruster Y/N:	yes
Make bow thruster:	Brunvoll
Capacity bow thruster:	300 Kw

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3.0 COMMUNICATION/NAVIGATIONAL EQUIPMENT

<i>Call sign:</i>	3E3595
<i>Radio telephonie:</i>	Furuno
<i>VHF:</i>	2/Furuno, FM 859
<i>Radar:</i>	2/Furuno, FR 2825-4a + FAR 2835S-7AF
<i>GMDSS (no./type):</i>	1/Furuno DSC receiver AA-50, DSC terminal DSC-6
<i>Gyro (no./type):</i>	1/YDK CMZ500 type 3
<i>Satcom A/B phone:</i>	773 251 416
<i>Satcom A/B telefax:</i>	-
<i>Satcom A/B telex:</i>	-
<i>Satcom C telex:</i>	423 551 410 / 423 551 411
<i>E-mail address:</i>	

4.0 MAIN ENGINE

<i>Type of main engine:</i>	Hyundai - B & W 5S35MC-6
<i>Number:</i>	1
<i>Maximum output:</i>	3500 Kw
<i>Grade fuel used:</i>	IFO 380 (CIMAC G35)
<i>Consumption/day:</i>	± 14.5 mton
<i>Maximum bunker capacity:</i>	257.57 m3 (100%)

5.0 AUXILIARIES

<i>Type of auxiliary engine:</i>	Cummins KTA 19-64 (M)
<i>Number:</i>	3
<i>Output each:</i>	476 Kw
<i>Grade fuel used:</i>	Gas oil (Iso-DMA)
<i>Consumption/day:</i>	± 2 - 4 mton (depending on cargo operation)
<i>Maximum bunker capacity:</i>	398.49 m3 (100%)

5.1 EMERGENCY GENERATOR

<i>Output of emergency generator:</i>	96 Kw
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6.0 CARGO INSTALLATION

Products:

Ammonia, Butadiene, Butane, Butylenes, Dimethylamine, Ethyl Chloride, Methyl Chloride, Commercial Propane, Propane, Butane/Propane mix, Isoprene, Monoethylamine, Propylene, Vinyl Ethyl Ether, Vinyl Chloride Monomer

Condition of transport:

semi/fully refrigerated

Maximum tank pressure:

8.0 bar absolute

Minimum tank pressure:

0.75 bar absolute

Minimum tank temperature:

-48 dgr. C.

IMO safety valve setting of cargo tanks:

7.0 bar gauge

USCG safety valve setting of cargo tanks:

4.0 bar gauge

Nr. of max. products to be transported:

2 (whereas only one product can be cooled)

TANK CAPACITY

VOLUME M3			0.6814 Ammonia -33.4 dgr.C.	0.653 Butadiene -4.5 dgr.C.	0.596 Iso-butane -12 dgr.C.
Tank	100%	98%			
1	3,204.549	3,140.458	2,139.908	2,050.719	1,871.713
2	3,184.377	3,121.689	2,126.438	2,037.809	1,859.931
TOTAL	6,388.926	6,261.147	4,266.346	4,088.528	3,731.644

TANK CAPACITY

VOLUME M3			0.6 N-butane -0.5 dgr.C.	0.5822 Propane -42.8 dgr.C.	0.6136 Propylene -47.7 dgr.C.
Tank	100%	98%			
1	3,204.549	3,140.458	1,884.275	1,828.375	1,926.985
2	3,184.377	3,121.689	1,872.414	1,817.865	1,914.855
TOTAL	6,388.926	6,261.147	3,756.689	3,646.240	3,841.840

TANK CAPACITY

VOLUME M3			0.83 Propylene-Oxide 95%	0.972 VCM -13.8 dgr.C.
Tank	100%	98%		
1	3,204.549	3,140.458	2,490.000 **	2,500.000 ***
2	3,184.377	3,121.689	2,490.000 **	2,500.000 ***
TOTAL	6,388.926	6,261.147	4,980.000	5,000.000

** These figures have been brought in line with the new IMO regulation which states that in case of the carriage of propylene-oxide cargoes the quantity of the cargo should not exceed 3,000 m3 in any one tank.

*** Deadweight restricted

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7.0 CARGO PUMPS

<u>DEEPWELL</u> <u>PUMPS</u>	Type:	<input type="text" value="Svanehoj"/>
	Number:	<input type="text" value="2"/>
	Capacity:	<input type="text" value="350 m3/hour (each)"/>
	Discharge head:	<input type="text" value="120 MLC"/>
	Maximum specific gravity:	<input type="text" value="970 kg/m3"/>

<u>BOOSTER</u> <u>PUMPS</u>	Type:	<input type="text" value="Svanehoj"/>
	Number:	<input type="text" value="1"/>
	Capacity:	<input type="text" value="300 m3/hour"/>
	Discharge head:	<input type="text" value="120 MLC"/>
	Maximum specific gravity:	<input type="text" value="680 kg/m3"/>

8.0 LOADING RATE

W I T H G A S R E T U R N

Ammonia:	<input type="text" value="at -34 dgr.C.: maximum 700 m3/hour"/>
Propane:	<input type="text" value="at -43 dgr.C.: maximum 700 m3/hour"/>
Propylene:	<input type="text" value="at -48 dgr.C.: maximum 700 m3/hour"/>

9.0 DISCHARGE CAPACITY

Number of deepwells in parallel:	<input type="text" value="2"/>
Capacity of deepwells:	<input type="text" value="700 m3/hour with 120 MLC"/>
Number of boosters:	<input type="text" value="1"/>
Capacity of boosters:	<input type="text" value="300 m3/hour with 120 MLC"/>
Capacity of deepwells and booster(s) in series:	<input type="text" value="300 m3/hour with 240 MLC"/>

10.0 DISCHARGE CAPACITY WITH HEATING UP SEAWATER +15 DEGREES CENTIGRADE

Ammonia from -34 dgr. C. up to -10 dgr. C.:	<input type="text" value="260 m3/hour"/>
Propane from -42 dgr.C. up to -10 dgr.C.:	<input type="text" value="420 m3/hour"/>
Propylene from -48 dgr.C. up to -10 dgr.C.:	<input type="text" value="400 m3/hour"/>
Heating up cargo en route?:	<input type="text" value="Yes"/>
Emergency pumping device:	<input type="text" value="pressurizing cargo tanks / discharge with booster pump(s)"/>
Cargo vaporiser?:	<input type="text" value="No"/>

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11.0 CARGO COMPRESSORS

Type:
Number:
Capacity:

12.0 NITROGEN PLANT

Make:
Type:
Capacity:
Supply pressure:

13.0 MEASURING APPARATUS

Level gauges (local indication)

type/make/number per tank:

Level gauges (remote indication)

Available?/if yes, number per tank?

Pressure gauges (local indication)

type/number per tank:

Pressure gauges (remote indication)

Available?/if yes, number per tank?

Temperature gauges (local indication)

type/number per tank:

Temperature gauges (remote indication)

Available?/if yes, number per tank?

Sampling level (local indication):

Closed loop sampling (y/n):

Connection (local indication):

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14.0 CARGO LINES

Size cargo manifolds:

Liquid cross over (system I):

8" ASA 300

Liquid cross over (system II):

6" ASA 300

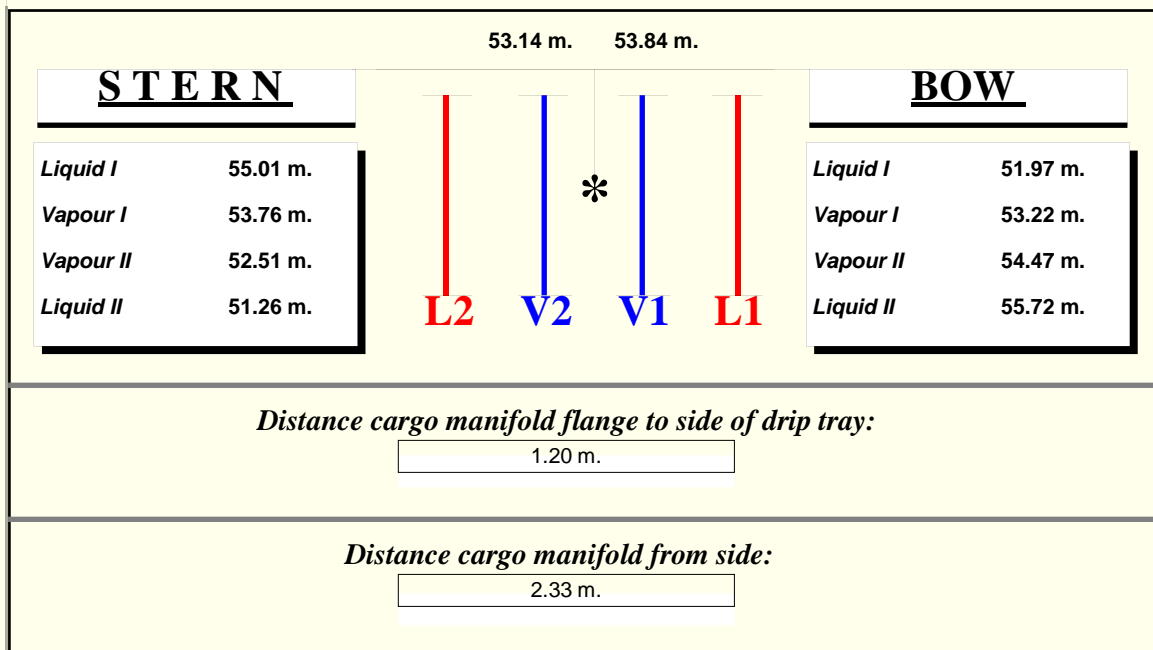
Vapour cross over (system I):

6" ASA 300

Vapour cross over (system II):

6" ASA 300

Distances Manifolds



Height cargo manifold:

above deck to centre line of flange:

3.77 m.

above drip tray to centre line of flange:

1.0 m.

above water line when light ship:

7.58 m.

when loaded up to summer mark:

6.03 m. (LPG) / 4.79 m. (VCM)

from keel:

12.02 m.

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14.0 CARGO LINES

The following reducers are on board; number/size/length:

1 of 6"/300 ASA x 8"/300 ASA; 1 of 8"/300 ASA x 10"/300 ASA; 1 of 6"/300 ASA x 4"/150 ASA; 1 of 8"/300 ASA x 8"/150 ASA; 3 of 6"/300 ASA x 4"/300 ASA; 1 of 8"/150 ASA x 6"/300 ASA

15.0 CRANES

Number of cranes:

2

SWL (of each crane):

one of 2 mton + one of 4 mton

Location of crane(s):

midships starboard and port side