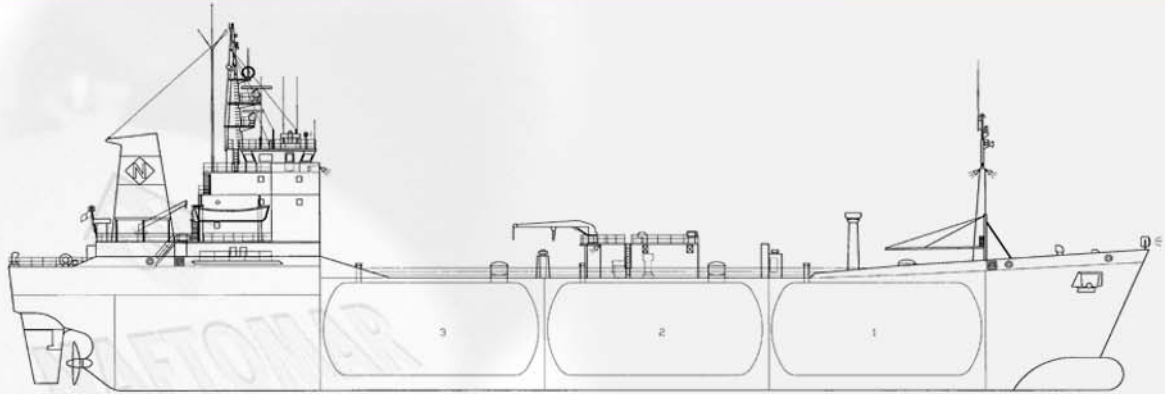




NAFTOMAR



GAZ LIBERTY

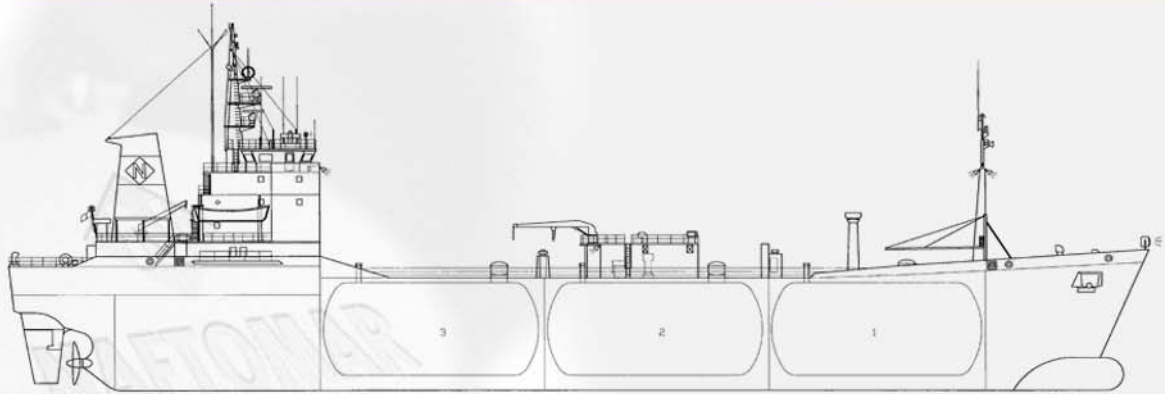
GENERAL CHARACTERISTICS

| | |
|--------------------|----------------------------------|
| Owners: | ENERGAS SHIPPING & TRADING |
| Built: | UK - 1982 |
| Flag: | PANAMA |
| Class: | BUREAU VERITAS |
| Call Sign: | 3 E B Y |
| GRT/NRT | |
| International: | 5992 / 1797 |
| Suez: | 6382 / 4684 |
| Panama: | 6554 / |
| IMO: | 8010763 |
| USCG: | YES |
| RINA: | YES |
| MOT: | NO |
| LOA: | 113,80m |
| LBP: | 106,5m |
| Breadth Moulded: | 18,41m |
| Depth Moulded: | 11,70m |
| DWT, Summer: | 7230 |
| Draft, Summer: | 8,118m |
| Draft, Propane: | 8,118m |
| Draft, Butane: | 8,118m |
| Air Draft: | 30,2m |
| Main Engine: | SULZER 5 RLA 56 |
| Maximum Power: | 5693 BHP |
| Fuel Grade: | IFO 380cSt @ 50degC |
| Consumption/day: | 13,2MT in ladden condition |
| Speed (Average): | 13,2kn - in ladden condition |
| Auxiliaries: | 3 x Stork Werkspoor DRO 218K |
| Power: | 3 x 734BHP |
| Total Available: | 2200BHP |
| Grade/Consumption: | MARINE DIESEL OIL - 2,8 MT (max) |
| Bunker Capacity: | 726MT HFO Sp. Gr. 0,971 at 98% |
| | 281MT MGO Sp.Gr 0,88 at 98% |

Particulars herein believed to be correct but not guaranteed



NAFTOMAR



GAZ LIBERTY

CARGO PLANT AND HANDLING EQUIPMENT

MARVS: 6,5 / 4,2 / 0,65 kg/cm sq
Min. Temperature: -48degC
Max. Specific Gravity: 0,972T/cbm
Max. Vacuum: 0,50bar (abs)
Cargo Pumps: 5x 150cbm/hr
Cargo Compressors: 2 x SULZER K 140 2F
1000-1100 cbm/hr propane @ 10degC / 5 bar
Cargo Heater: YES
Booster Pumps: 1 x 150cbm/hr @ 200mlc
Deck Tanks: NO
Inert Gas Plant: 580Ncbm/hr
Cargo Vaporizer: YES
Bow Thruster: NO
Cargo Manifolds: L - V - V - L

INDICATIVE CAPACITIES OF CARGO TANKS

| TANK No. | CBM 100% (m3) | S.G. T°C | BUTANE | PROPANE | BUTADIENE | PROPYLENE | AMMONIA | VCM |
|--------------|------------------|-------------|---------------------|--------------------|------------------|--------------------|----------------------|--------------------|
| | | | 0,601SG -0,5degC | 0,582SG -42degC | 0,646SG 0degC | 0,609SG -42degC | 0,682SG -33,6degC | 0,969SG -13degC |
| 1 | 1438,40 | | 846,0 | 821,0 | 908,0 | 850,0 | 958,0 | 1.297,0 |
| 2 | 2593,20 | | 1.526,0 | 1.732,0 | 1.649,0 | 1.545,0 | 1.739,0 | 2.314,0 |
| 3 | 2581,50 | | 1.519,0 | 1.725,0 | 1.634,0 | 1.530,0 | 1.724,0 | 2.378,0 |
| TOTAL | 6613,10 | | 3.891,0 | 4.278,0 | 4.191,0 | 3.925,0 | 4.421,0 | 5.989,0 |