M.V. NORTHERN LIGHT

: Northern Light

Principal Particulars Name



Flag	: Norweg	lian		
	: Egersu			
	: May, 2015			
	: LAVI7			
•	: 257972	000		
	: 974405			
Class	: DNV GL			
Туре			Geored Self-T	rimming single deck
туре		•		Cargoes Holds 2 + 4
		•	eneu ioi neavy	Cargoes holds 2 + 4
Full Close Notation		Left Empty.		
Full Class Notation				C-BEO Recyclable
				T-PSPC (B), BIS Holds
Leavestly Orientell		ay be left empty	Y TIMON.	
5	: 199.90r			
Length between Perpendiculars				
		32.26m		
	: 18.50m			
		5/5		
_	62.30			
-	: 302mm			
	: 5.228m			
Distance Keel to Top of Mast	: 48.57m			
Constant Excluding Fresh Water	: 250mt			
Deadweight - Summer	63242.10mt on 13.294m / TPC 62.30			
Winter	61480.80mt on 13.017m / TPC 62.23			
Fresh	: 63242.10mt on 13.596m / TPC 62.35			
Tropical	: 64939.30mt on 13.571m / TPC 62.34			
Tropical Fresh	: 64939.3	30mt on 13.873	m / TPC 62.39	
	: 75197.			
•	: 11917.6	63mt		
	: 36321			
0	: 21598			
		38 / 33455.34		
Panama Gross / Net Tonnage				
•	· 78750.7	75 / 73680		
1 ,	: Hold	Grain(m3)	Bale(m3)	
	1	13957.79	13200	
	2	17658.30	16650	
	3	15352.99	14080	
	4	15839.60	15000	
	5	15942.07	14750	
	Total	78750.75	73680	
Type of Hatch Covers		ansverse Foldi		r
Bulkheads	: 113, 11 : A60			I
Hatch Dimensions	: Hatch	Length (m)	Breadth (m)	Strength (tm2)

	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Hold Dimensions	: Hold Length (m) Fwd (m) Aft (m) Strength (tm2) 1 27.06 14.670 23.824 25 2 33.62 23.824 23.824 20 3 26.24 23.824 23.824 25 4 28.70 23.824 23.824 20 5 31.50 23.824 7.103 25	
Hold Overhang Distances	: Hold Fwd (m) Aft (m) 1 5.00 4.50 2 4.75 5.50 3 4.25 4.25 4 4.25 4.25 5 5.00 4.75	
Max Permissible Load per Holo		
Main Deck Strength Distance From	: 3.5 t/m2 : Waterline to Top of Hatch Coaming 50% Bunkers Hold No Ballast Light Ballast Heavy Ballast 1 20.03m 16.03m 13.10m 2 19.40m 15.56m 12.90m 3 18.40m 14.99m 11.92m 4 17.30m 14.50m 12.00m 5 17.10m 14.26m 11.06m	
Distance From	: Waterline to Highest Point Light Ballast Heavy Ballast Laden 41.72m 39.37m 35.27m	
Distance From Tanktop To	: Hold Underside Hatch Cover Underside Weatherded 1 19.30m 16.90m 2 19.30m 16.90m 3 19.00m 16.90m 4 19.00m 16.90m 5 19.00m 16.90m	ж
Distance From Deck To	: Hold Top of Hatch Cover 1 3.15m 2 3.15m 3 2.85m 4 2.85m 5 2.85m	
Cement Holes Diamete Location	 2 on each hatch cover, 1 Port Side Fwd, 1 Stbd Side Aft 70cm Fwd Hole 4.1m from Port Side Edge of Cover and 2.3m from Fwd Edge of Cover. Aft Hole 4.1m from Stbd Side Edge of Cover. 	

Engine	Cover and 2.3m from Aft Edge of Cover. : DOOSAN MAN B&W 5S60ME-C8.2,8050KW @ 89 R/MIN CSR (85% CMCR) 6842.5KW @ 84.3 R/MIN
IFO Capacity Total	: 1973.28 CBM
HSFO Capacity	: 1973.28 CBM
FSIFO Capacity	: N/A
MDO / LSMGO Capacity	: 98.94 CBM / 117.16 CBM
Total Fresh Water Capacity	:518.23 CBM
Total Ballast Capacity - Light	: 17702.27 CBM
Heavy	: 33055.26 CBM
Hold 3	:15352.00 CBM
Ballast and Deballasting Time	: 1800mt per Hour
CO2 Fitted	: Yes

Tank Capacities

IFO 380CST RMG 380. Max Sulphur 3.5%, ISO 8217: 2010 Specs. (100%)No. 1 HSFO Tank Port: 470.12 CBMNo. 1 HSFO Tank Stbd: 470.12 CBMNo. 2 HSFO Tank Port: 516.52 CBMNo. 2 HSFO Tank Stbd: 516.52 CBMMGO DMA, Max Sulphur 0.1%, ISO 8217: 2010 Specs (100%)MDO Tank: 98.94 CBMLSMGO Storage Tank: 117.16 CBMVessel can only accommodate 85% Bunkers in each tank.

Vessel's Communication Details:

Gear:

Cranes	: 4 x 36mt Mitsubishi Electro-Hydraulic Single Deck Crane	s
Position	: Between Hatch No. 1 & 2, 2 & 3, 3 & 4 and 4 & 5	-
Maximum Working Radius	: 30m	
Max Outreach from Ships Rail	: 13.87m	
Cycle Time with Maximum Cargo	o: 2Min 12Sec	
Slewing Speed	: 0.45 RPM	
Luffing Speed	: 58 Seconds	
Hoisting speed (Maximum Load)	: 16m / Minute	
SWL of Cranes in Hook Mode	: 35mt	
SWL of Cranes in Grab Mode	: 27.88mt	
Grabs	: 4 x 15m3 Smag Peiner Electro-Hydraulic Grabs	
Weight of Grabs	: 9.380mt	
Maximum Cargo Density	: 2.8t/m3	
Filling Volumes with kick Plates	: Volume (m3) Density t/m3 SWL (mt)	

Maximum Quantity Liftable	15.00 12.50 10.00 8.00 6.60 : 18.50mt	1.20 1.45 1.85 2.30 2.80	18.00 18.13 18.50 18.40 14.40
General: Registered Owners Owners Since	 LHS1 - Northern Nedre Bekkegt 1, 4370 Egersund Norway Delivery from Yar 	Postboks 356	
Commercial Managers	: Lighthouse Mariti C/O Lighthouse N 87/2 All Seasons Wireless Road, L Bangkok, 10330, Tel: +66 2 654 31 Email: <u>chartering</u>	lavigation Co.L Place, Unit 44 umpinee, Path Thailand 00, Fax: +66 2	03 CRC Tower 44/F umwan, 2 654 3101
Technical Managers P N I Club H & M Underwriters H & M Insured Value	 Fleet Management 11F/ Dah Sing Find 108 Gloucester R Tel: + 852 2298 8 <u>fleet-hk-tech@fleet</u>	nancial Centre load, Wanchai, 345, Fax : +85 <u>etship.com</u> behalf of ASSU	RANCEFORENINGEN

Speed and Consumption

The speed and consumption details are guaranteed at open sea basis design draft, even keel, clean bottom, under good weather conditions up to and including Beaufort scale 4 (11-16 Knots) and total combined (sea & swell) significant wave height confined to limits of Douglas sea state 3 (0.5-1.25m) with no adverse currents and no current factor, excluding when maneuvering or sailing in shallow/ restricted waters, when approaching/ entering/ leaving ports, rivers, canals etc.

LADEN	ABOUT 13.50 KNOTS ON ABOUT 28.5 MT IFO 380 CST + ABOUT 0.1 MT MDO
BALLAST	ABOUT 13.50 KNOTS ON ABOUT 25.5 MT IFO 380 CST + ABOUT 0.1 MT MDO

ECO SPEEDS (NOT WARRANTED)

LADEN	ABOUT 12.50 KNOTS ON ABOUT 23.0 MT IFO 380 CST + ABOUT 0.1 MT MDO
	ABOUT 11.00 KNOTS ON ABOUT 16.0 MT IFO 380 CST + ABOUT 0.1 MT MDO
BALLAST	ABOUT 12.50 KNOTS ON ABOUT 22.0 MT IFO 380 CST + ABOUT 0.1 MT MDO
	ABOUT 11.00 KNOTS ON ABOUT 15.0 MT IFO 380 CST + ABOUT 0.1 MT MDO

In Port Idle: About 3.2mt IFO and about 0.1mt MDO for Auxiliaries + about 1.0mt IFO for Boiler

In Port Working: About 5.0mt IFO and about 0.1mt MDO for Auxiliaries + about 1.0mt IFO for Boiler + about 1.0mt IFO when using ballast water treatment system.

Owners warrant the speed and consumption figures from time of delivery and throughout the duration of the Charter Party.

The word about in speed and consumption refers to allowance of -0.5 knots and + 5% on consumption respectively, speed is not to be debited due to favorable currents and a current factor is not to be applied to increase the C/P speed on steaming days which the vessel experienced favorable current.

Bunker saving to offset time lost.

Eco speeds and consumptions are not warranted by Owners. if Charterers elect to steam at eco speed, Owners reserve the right to speed up at least 1 hour every 24 hours.

For the purpose of evaluating vessel performance it is agreed all days where the weather exceeds Beaufort force 4 and / or Douglas sea state 3 are expressly excluded from the calculations.

Vessel burns LSMGO when maneuvering, in/out of ports, navigating in confined waters, crossing canals, rivers, straits and during poor visibility/ emergency and light running of auxiliary engines. The above are warranted for (BFF4), combined wave height <1.25m (DSS3), no adverse currents.

Vessel to have liberty of slow steaming at sea for the purpose of ballast exchange, if required. If chemicals are required to treat the ballast during exchange, then the cost of chemicals to be for charterers account.

Quality of bunkers supplied to confirm to current ISO specifications at time of supply. IFO 380 CST: Specs., ISO 8217 2010 RMG 380, max sulphur 3.5% MGO: Specs., ISO 8217 2010 DMA, max sulphur 1.5% LSMGO: Specs., ISO 8217 2010 DMA, max sulphur 0.1%

Limits of Fitness

The vessel is in every way fitted for ordinary cargo service. Equipment, fittings and certificates as on board on delivery.

Any certificates, fittings and or equipment required for charterers trade in addition to the above, customary or not, to be for charterers account.