

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 18.3.1950. When handed in at Local Office 20th Mar. 1950. Port of MIDDLESBROUGH.  
 Date, First Survey 19th Aug. 1949 Last Survey 9th March. 1950.  
 Reg. Book MIDDLESBROUGH. (Number of Visits 58.)  
 on the t.s.s. "GADINIA". Tons { Gross - Net - }  
 built at South Bank. By whom built Messrs. Smith's Dock Co. Ltd. Yard No. 1187 When built 1950  
 engines made at South Bank. By whom made Smith's Dock Co. Ltd. Engine No. 653 When made 1950  
 Glasgow - Bamock & Wilcox Contract 6/1960  
 boilers made at Grognock By whom made J.G. Kincaid Con. 359 Boiler No. 359 When made 1949  
 Service - 3800 By whom made N.V. Curacaosche Scheepvaart  
 Maximum - 4200 Owners Maa tschappij, Emmastad, Curacao Port belonging to Willemsstad  
 m. Horse Power as per Rule 730 MN Is Refrigerating Machinery fitted for cargo purposes. No Is Electric Light fitted. Yes  
 made for which vessel is intended Tanker

GINES, &c.—Description of Engines Triple Expansion Steam Reciprocating (2 sets) Revs. per minute Max- 95  
 No. of Cylinders 21 1/2", 36" 61" Length of Stroke 39" No. of Cylinders 3 Each Engine No. of Cranks 3 Each Engine  
 Crank shaft, dia. of journals as per Rule 11.94 Mid. length breadth 1-9" Thickness parallel to axis 8" (LP 8 1/4")  
 as fitted 12 3/4" Crank pin dia. 12 3/4" Crank webs Mid. length thickness 8" (LP 8 1/4") Thickness around eye-hole 5 5/8"  
 Intermediate Shafts, diameter as per Rule 11.39" Thrust shaft, diameter at collars as per Rule 11.94"  
 as fitted 12 3/4" as fitted 12 3/4"  
 Propeller Shafts, diameter as per Rule - Screw Shaft, diameter as per Rule 12.34"  
 as fitted - as fitted 12 7/8" to 12 1/4" Is the { tube } shaft fitted with a continuous liner { Yes }  
 as fitted - as fitted 1 1/2"  
 Liners, thickness in way of bushes as per Rule 11/16" Thickness between bushes as per Rule 1/2"  
 as fitted 27/32" as fitted 17/32" Is the after end of the liner made watertight in the  
 bell boss. Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner -  
 the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive -  
 no liners are fitted, is the shaft lapped or protected between the liners - Is an approved Oil Gland or other appliance fitted at the after end of the tube

Shaft-Yes If so, state type Vicker's Vista Gland Length of Bearing in Stern Bush next to and supporting propeller 4' 11 3/8"  
 Propeller, dia. 14' 0" Pitch 15.86/13.42 No. of Blades 4 Material Bronze whether Moveable Solid Total Developed Surface 72.4 sq. feet  
 Main Pumps worked from the Main Engines, No. None Diameter - Stroke - Can one be overhauled while the other is at work -  
 Auxiliary Pumps worked from the Main Engines, No. 1-Each Engine Diameter 7 1/2" Stroke 6 1/2" Can one be overhauled while the other is at work Yes  
 No. and size 2 13 1/2" x 10" x 24" Pumps connected to the { No. and size 1-10" / x 12" x 12" and 2- 7 1/2" x 6 1/2" }  
 How driven Independent steam driven Main Bilge Line How driven Independent Steam M.E. Driven

Fast Pumps, No. and size 1 - 10" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size -  
 two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Main Pumps:—In Engine and Boiler Room 3-3" Bilge suction, 1-2" Cofferdam suction, 2-2" Oil bilge suction  
 in Pump Room 1-3" Suction In Holds, &c. 1-6" fore peak, 1 - 4" Aft peak (1-2 1/2" fore hold)  
 1 - 6" forward main cofferdam (B. & Bal. pump room)

Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 11" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 and size 1 - 4" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes  
 the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges. Yes  
 all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Both  
 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates. Yes Are the Overboard Discharges above or below the deep water line. Below  
 they each fitted with a Discharge Valve always accessible on the plating of the vessel. Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate. Yes  
 Pipes pass through the bunkers None How are they protected -  
 pipes pass through the deep tanks None Have they been tested as per Rule -

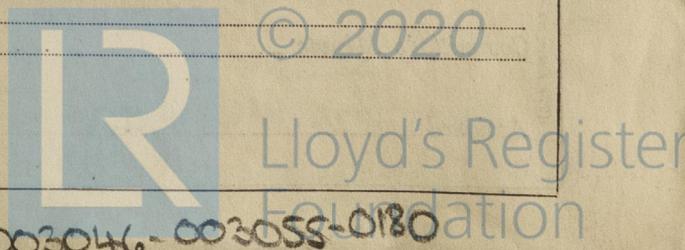
All Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times. Yes  
 arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one  
 compartment to another. Yes Is the Shaft Tunnel watertight. None Is it fitted with a watertight door. - worked from -

BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers 10,640 sq. ft.  
 Boilers are fitted with Forced Draft Both Which Boilers are fitted with Superheaters. None  
 and Description of Boilers 2 B & W Type Water Tube Working Pressure 220 lbs per sq. inch.

REPORT ON MAIN BOILERS NOW FORWARDED?  
 1 DONKEY BOILER FITTED? No If so, is a report now forwarded? No  
 the donkey boiler be used for domestic purposes only -  
 Are approved plans forwarded herewith for Shafting. No Main Boilers. No Auxiliary Boilers. No Donkey Boilers. No  
 (If not state date of approval)  
 Water heaters - General Pumping Arrangements. No Oil fuel Burning Piping Arrangements. No  
 Plans retained for duplicate ships.

SPARE GEAR.  
 the spare gear required by the Rules been supplied. Yes  
 the principal additional spare gear supplied. 1 - Eccentric strap and 1 - sheave complete with bolts.  
 1 - Guide shoe with bolts.  
 1 - Piston rod.  
 1 - Set coupling bolts and nuts.  
 1 - Impeller shaft for circulating pump.

The foregoing is a correct description.  
 Signature: [Handwritten Signature] ENGINE WORKS MANAGER  
 Manufacturer.



003046-003055-0180

1949. Aug. 19, Sept. 9, 21. Oct. 5, 7, 10, 14, 18, 20, 25, 26, 27, 28. Nov. 1, 2, 10, 11, 12, 14, 15, 17, 18, 21, 22, 23, 24, 29. Dec. 9, 15, 18, 19, 22, 28. (1950) Jan. 11, 12, 19, 20, 23, 27, 31. Feb. 1, 2, 3, 6, 10, 14, 17, 20, 22, 23, 27, 28. Mar. 2, 3, 7, 9.

Dates of Survey while building  
During progress of work in shops - -  
During erection on board vessel - - -  
Total No. of visits

Dates of Examination of principal parts - Cylinders 5, 7, 18/10/49, 1.11.21/11/49  
Slides 5/10/49, 21/11/49  
Covers 5/10/49, 21/11/49  
Pistons 21/11/49 & 27/1/50 Piston Rods 22/11/50 Connecting rods 22/11/50  
Crank shaft P. 11/11/49 S. 21/11/49 Thrust shaft 2/2/50 Intermediate shafts 2/2/50  
Tube shaft - Screw shaft P. 28/10/49 S. 26/10/49 Propeller P. 15/11/49 S. 17/11/49  
Stern tube 9/9/49 & 10.11.12. 15/11/49 Engine and boiler seatings 2/2/50 Engines holding down bolts 2/2/50  
Completion of fitting sea connections 22/12/49  
Completion of pumping arrangements 7/3/50 Boilers fixed 11, 12/1/50 Engines tried under steam 2.7.9/3/50  
Main boiler safety valves adjusted 27/2/50 Thickness of adjusting washers Port Blr. P. 17/32" S. 35/64" Std. Blr. P. 37/64" S. 9/16"  
Crank shaft material OH Steel Identification Mark 2715 & 2718 Thrust shaft material O.H. Steel Identification Mark 2992 & 2993  
Intermediate shafts, material OH Steel Identification Marks 2994 & 2995 Tube shaft, material - Identification Mark 24.11.49  
Screw shaft, material OH Steel Identification Mark 2996 & 2997 Steam Pipes, material Steel Test pressure 675 lbs per sq. inch. Date of Test 11.19.23  
Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150° F. Yes 3.6.10.20.22  
Have the requirements of the Rules for the use of oil as fuel been complied with Yes - Steam Fire Extinguishing Fitted and Tested.  
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. - If so, have the requirements of the Rules been complied with -  
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with No  
Is this machinery duplicate of a previous case. Yes If so, state name of vessel "GASTRANA"

General Remarks (State quality of workmanship, opinions as to class, &c.)  
The engines and boilers of this vessel were built under special survey and the materials and workmanship are good.  
After securing in place on board, the engines and boilers were tried under normal working conditions alongside and at sea and found satisfactory.  
The safety valves of all boilers were adjusted to 220 lbs per sq. inch.  
The machinery of this vessel is now in good and efficient condition and eligible in our opinion to have record of LMC. 3.50, and notation T.S. (C.L) 3.50, fitted for burning oil fuel 3.50, (flash point above 150° F) and fitted forced draught.

Propellers - Identification Marks - P. Lloyds C.A.B. 28.9.48  
S. " " 30.11.48

Certificate to be sent to  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee	3/5.	£	132	12	0	When applied for,
Special		£				
Donkey Boiler Fee		£				When received,
Travelling Expenses (if any)		£				

*H. Smith*  
Engineer Surveyor to Lloyd's Register of Shipping

FRI. 28 APR 1950

Committee's Minute  
Assigned + LMC 3.50  
Fitted for OIL FUEL 3.50 FLASH POINT ABOVE 150°F. F.D. C.L. O.G. 2WTB 22016.

