

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 19557.

Date of writing Report 16-4-1938 When handed in at Local Office 16-4-1938 Port of Leith Received at London Office 17-5-1938

No. in Survey held at Burntisland Reg. Book. 29710 on the S.S. "PORTSEA"

Date, First Survey 21-2-38 Last Survey 11-4-1938 (Number of Visits 9.)

Built at Burntisland By whom built Burntisland, J. B. Co. Ltd. Yard No. 218 Tons } Gross 1582.59  
Net 942.99

Engines made at Greenock By whom made Rankine & Blackmore Ltd. Engine No. 456 When built 1938

Boilers made at J. By whom made J. Boiler No. 456 When made 1938

Registered Horse Power Owners Sea Steamship Co. Ltd. Port belonging to Hull.

Nom. Horse Power as per Rule 167 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes

Trade for which Vessel is intended

## ENGINES, &amp;c.—Description of Engines

Dia. of Cylinders Length of Stroke No. of Cylinders Revs. per minute 99

Crank shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth Mid. length thickness No. of Cranks Thickness parallel to axis shrunk Thickness around eye-hole

Intermediate Shafts, diameter as per Rule as fitted Thrust shaft, diameter at collars as per Rule as fitted

Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule as fitted Is the after end of the liner made watertight in the propeller boss

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

If 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

If two 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 If so, state type

Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of Blades Material whether Moveable Total Developed Surface sq. feet

Feed Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

Feed Pumps { No. and size How driven Pumps connected to the Main Bilge Line { No. and size How driven

Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler

Bilge Pumps;—In Engine and Boiler Room 2 at 2 1/2" dia. on PORT SIDE 1 at 2 1/2" dia. on Starboard side 1 at 3 1/2" dia. on Starboard side

In Pump Room AFTER HOLD 1 P. & 1 S. 3" dia. AFT HOLD WELL 1 at 2 1/2" dia. TUNNEL WELL 1 at 2 1/2" dia.

Main Water Circulating Pump Direct Bilge Suctions, No. and size one at 4" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one at 3 1/2" dia.

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes

Are 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

Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Both

Are 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 Above

Are 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

What Pipes pass through the bunkers Bilge Suction pipes How are they protected Wood casing

What pipes pass through the deep tanks Have they been tested as per Rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

Is the 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 Yes Is it fitted with a watertight door Yes worked from Top E.R. platform

## MAIN BOILERS, &amp;c.—(Letter for record) Total Heating Surface of Boilers

Forced Draft fitted No. and Description of Boilers Working Pressure

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

IS A DONKEY BOILER FITTED?

the donkey boiler intended to be used for domestic purposes only See Greenock Rpt. No. 20522 If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers

Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

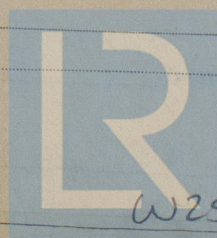
## SPARE GEAR.

as the spare gear required by the Rules been supplied Yes

ate the principal additional spare gear supplied One Cast Iron Propeller

The foregoing is a correct description,

Manufacturer.



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Lloyd's Register  
Foundation

W256-0089



Dates of Survey while building  
During progress of work in shops - -  
During erection on board vessel - -  
Total No. of visits 9

Dates of Examination of principal parts—Cylinders Slides Covers  
Pistons Piston Rods Connecting rods  
Crank shaft Thrust shaft Intermediate shafts  
Tube shaft Screw shaft in place 28-2-38 Propeller in place 28-2-38  
Stern tube in place 25-2-38 Engine and boiler seatings 28-2-38 Engines holding down bolts 21-3-38  
Completion of fitting sea connections 28-2-38  
Completion of pumping arrangements 6-4-38 Boilers fixed 15-3-38 Engines tried under steam 11-4-38  
Main boiler safety valves adjusted 6-4-38 Thickness of adjusting washers PORT. P=3/8" S=3/8" SUP=5/16" STARBOARD. P=3/8" S=3/8" SUP=1/4"  
Crank shaft material Identification Mark Thrust shaft material Identification Mark  
Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark  
Screw shaft, material Identification Mark Steam Pipes, material Steel Test pressure 600lb/sq. Date of Test 31-3-38  
Is an installation fitted for burning oil fuel No. Is the flash point of the oil to be used over 150°F. ✓  
Have the requirements of the Rules for the use of oil as fuel been complied with ✓  
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 ✓  
Is this machinery duplicate of a previous case No. If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery—Greenock Report No. 20522 has been efficiently fitted on board, the materials and workmanship being sound and good. On completion, the safety valves were adjusted to 200lb/sq. and the Main and Auxiliary machinery were tried under working conditions at sea and found satisfactory. This machinery in my opinion, is in safe working condition and eligible to be classed in the Register Book with the notation of L.M.C. 4-38 and T.S.(C.L.) 4-38.

The amount of Entry Fee ... £  
Special L.M.C. ... £ 8:7:0  
Donkey Boiler Fee ... £  
Travelling Expenses (if any) £ 1:14:9

When applied for,  
18-4-1938  
When received,  
31/5/1938

J. H. Campbell  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 26 APR 1938  
Assigned + L.M.C. 4-38 (S.P.)  
FD Ch