

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office.

Date of writing Report 6th Jan. 1943 When handed in at Local Office 6th Jan. 1943 Port of Vancouver, B. C.
 Re-typed- 15th Sept. 1943.
 No. in Survey held at Vancouver, B. C. Date, First Survey 9th December 1942 Last Survey 22nd January 1943
 Reg. Book. (Number of Visits 27)
 --- on the Steel Single Screw Steamer, "FORT JEMSEG" Tons {Gross 7134.01
 Net 4244.00
 Built at Vancouver, B.C. By whom built Burrard Dry Dock Company Limited (South) 153 Yard No. 153 When built 1942
 Engines made at Toronto, Ontario. By whom made John Inglis Co. Ltd. Engine No. 135-M When made 1942
 Boilers made at Vancouver, B. C. By whom made Dominion Bridge Co. Ltd. Boiler No. 329 When made 1942
 Registered Horse Power. 229 Owners Minister of Munitions & Supply of Canada Port belonging to ---
 Nom. Horse Power as per Rule 504 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended General Cargo.

ENGINES, &c.—Description of Engines Triple expansion superheat to 575°F Revs. per minute 80
 Dia of Cylinders 24½" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals 13.99" as per Rule 14½" as fitted Crank pin dia. 14½" Mid. length breadth --- Thickness parallel to axis 9.89½" L.P. Pin 7½" Journal 7½"
 Intermediate Shafts, diameter 13.33" as per Rule 13.5" as fitted Crank webs --- Mid. length thickness --- Thickness around eye-hole ---
 Thrust shaft, diameter at collars 13.99" as per Rule 14.25" as fitted
 Tube Shafts, diameter --- as per Rule --- as fitted Screw Shaft, diameter 14.87" as per Rule 15.25" as fitted Is the tube shaft fitted with a continuous liner Yes
 Bronze Liners, thickness in way of bushes .75" as per Rule .78125" as fitted Thickness between bushes .565" as per Rule .68" as fitted Is the after end of the liner made watertight in the propeller boss Yes
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner solid
 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 tight fit
 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 No
 If so, state type --- Length of Bearing in Stern Bush next to and supporting propeller 61"
 Propeller, dia. 18'-6" Pitch 16'-0" mean of Blades 4 Material bronze whether Moveable solid Total Developed Surface 117 sq. ft.
 Feed Pumps worked from the Main Engines, No. none Diameter --- Stroke --- Can one be overhauled while the other is at work ---
 Bilge Pumps worked from the Main Engines, No. two Diameter 4½" Stroke 26" Can one be overhauled while the other is at work Yes
 Feed (No. and size two 10"x7"x24" Pumps connected to the --- No. and size Four (one) 10x12x10" (one) 9x6x10" Two Rams
 Pumps (How driven Steam Worthington Simplex Main Bilge Line --- How driven Duplex steam Duplex steam M.E.
 Ballast Pumps, No. and size (one) 10"x12"x10" (duplex) Lubricating Oil Pumps, including Spare Pump, No. and size none
 Are two independent means arranged for circulating water through the Oil Cooler --- Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps: In Engine and Boiler Room 1-3" dia. Port, 1-3" dia. Starbd. in Blr. Rm; 1-3" dia. Port, 1-3" dia. Starbd. in Eng. Rm.
 In Pump Room 1-2" dia. in Thrust Recess, 1-2½" dia. in Tunnel Well, 1-4" dia. to F.P.; 1-3" dia. P.&S. to Nos. 1-2-3-4-
and 5 holds; 1-4" dia. to A.P.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 9" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 5" dia. starbd. side
 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, main injection fitted
 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 below
 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 steel air pipes to No. 4 D.B. tanks How are they protected steel straps welded across frames under limber boards
 What pipes pass through the deep tanks No. 7 D.B. air pipes Have they been tested as per Rule Yes
 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 No worked from ---

MAIN BOILERS, &c.—(Letter for record ---) Total Heating Surface of Boilers 7,140 square feet
 Which Boilers are fitted with Forced Draft all three Which Boilers are fitted with Superheaters all three
 No. and Description of Boilers 3, single ended multitubular Working Pressure 220 lbs. per square inch
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? ---
 Can the donkey boiler be used for domestic purposes only ---

PLANS. Are approved plans forwarded herewith for Shifting in U.K. Main Boilers --- Auxiliary Boilers --- Donkey Boilers ---
 (If not state date of approval)
 Superheaters Approved plans in U.K. General Pumping Arrangements --- Oil fuel Burning Piping Arrangements ---

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied As per list forwarded with Vcr. Report No. 5718 "FORT ST. JAMES"

The foregoing is a correct description

Burrard Dry Dock Company, Limited

Manufacturer.

President



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Lloyd's Register

W272-0110

Dates of Survey while building
During progress of work in shops - - See TORONTO REPORT NO. 906.
1942
Dec. 9, 10, 14, 16, 17, 18, 21, 22, 23, 24, 28, 29, 30;
During erection on board vessel - - 1943
Jan. 2, 6, 7, 8, 11, 13, 14, 15, 17, 18, 19, 20, 22, 22.
Total No. of visits 27

SEE TORONTO REPORT NO. 906
Dates of Examination of principal parts
Cylinders
Slides
Covers
Pistons
Piston Rods
Connecting rods
Crank shaft
Thrust shaft 7th January, 1943
Intermediate shafts 7th January, 1943
Tube shaft
Screw shaft 9th December, 1942
Propeller 9th December, 1942
Stern tube 9th December, 1942
Engine and boiler seatings 17th December, 1942
Engines holding down bolts 11th January, 1943
Completion of fitting sea connections 10 December, 1942
Completion of pumping arrangements 13th Jan. 1943
Boilers fixed 23rd Dec. 1942
Engines tried under steam 13th Jan. 1943
Main boiler safety valves adjusted 13th January 1943
Thickens of adjusting washers P. Blr. P.19/32-7/8 C.B. P.37/64-3" S.B. P.17/32-11/16"
Lloyd's 8095 AS 30-6-42
S.19/32-4" S.B. S.9/16-11/16"
Lloyd's 5577 PW 17-7-42
JBF 23-10-42
Crank shaft material O.H. Steel Identification Mark Lloyd's 8840 EER 8-10-42
Thrust shaft material O.H. Steel Identification Mark Lloyd's 8623 EER 22-8-42
Intermediate shafts, material O.H. Steel Identification Mark Lloyd's 8850 EER 21-10-42
Shaft material Lloyd's 8654 EER 18-8-42
Screw shaft, material O.H. Steel Identification Mark Lloyd's 5722 PW 11-9-42
5772 PW 9-10-42
Pipes, material S.D. Steel Test pressure 660 lbs Date of Test 11th Jan/43
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 No 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 Yes If so, state name of vessel S.S. "FORT ST. JAMES" Vcr. Rpt. No. 5718.
General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under special survey of the Toronto Surveyors and installed on board under special survey in accordance with the approved plans, New York letters and otherwise in conformity with the Society's Rules. The materials and workmanship are good and the tests required by the Rules have been satisfactorily carried out. The whole installation has been examined and tested under full working conditions on sea trials and afterwards part opened out, examined and found satisfactory. The machinery has also been surveyed during construction and installation on behalf of Wartime Merchant Shipping, Ltd., to ensure that the terms of the specifications have been fully complied with and this work has been satisfactorily carried out.

The machinery of this vessel is eligible in our opinion to be classed in the Register Book with notation of *L.M.C. 1,43 Screw Shaft C.L. 3 S.E. Blrs. 220 lbs. per sq. in. F.D.

Toronto fees charged in Toronto Report No. 906.

The amount of Entry Fee ... £ : : When applied for,
Special (Vcr.) ... \$133.00 : 22nd Jan. 1943
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) \$ 20.00 :
When received, 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

TUES. 1 FEB 1944

+ LMC 1.4.3

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