

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

1 MAY 1944

Date of writing Report 15th March, 1944 When handed in at Local Office 15th March, 1944 Port of Vancouver, B. C. Received at London Office 28 APR 1944

No. in D.O. Survey held at Vancouver, B. C. Date, First Survey 9th Dec., 1943 Last Survey 8th March, 1944
Reg. Book --- (Number of Visits 28)

on the Steel Single Screw Steamer "FORT LA HAVE" Tons { Gross 7165.84
Net 4241.88

Built at North Vancouver, B.C. By whom built Burrard Dry Dock Co. Ltd. Yard No. 202 When built 1944

Engines made at Lachine, P.Q. By whom made Dominion Engineering Wks. Ltd. Engine No. 145 When made 1944

Boilers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd. Boiler Nos 627 & 628. When made 1944

Registered Horse Power 229 Owners Minister of Munitions & Supply of Canada. Port belonging to ---

Nom. Horse Power as per Rule 628 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 450° F. Revs. per minute 76

Dia. of Cylinders 24 1/2" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 14.21 as fitted 14 1/2" Crank pin dia. 14 1/2" Crank webs Mid. length breadth --- Thickness parallel to axis 9" & 9 1/2" L.P.

Intermediate Shafts, diameter as per Rule 13.53 as fitted 13.5 Thrust shaft, diameter at collars as per Rule 14.21" as fitted 14.25" Thickness around eye-hole 7 1/2" Pin 7 3/8" Journal

Tube Shafts, diameter as per Rule --- as fitted --- Screw Shaft, diameter as per Rule 15.07" as fitted 15.25" Is the tube shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule .75" as fitted .78125 Thickness between bushes as per Rule .565" as fitted .68" Is the after end of the liner made watertight in the propeller boss Yes

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 Continuous

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

Propeller, dia. 18'-6" Pitch 16'-0" No. 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 4 1/2" Stroke 26" Can one be overhauled while the other is at work Yes

Feed (No. and size Two 12" x 8" x 24" Pumps connected to the Main Bilge Line { No. and size Four (Two) 10" x 11" x 12" Two 4 1/2" Rams

Pumps (How driven Steam Worthington Simplex Main Bilge Line { How driven Duplex - Steam M.E.

Ballast Pumps, No. and size One- 10" x 11" x 12" (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 One 3" P&S, one 3" thrust recess, one 2 1/2" tunnel well, one 3" P&S for'd.

Cofferdam. One 2 1/2" P&S after Cofferdam. In Holds, &c. One 3" P&S Nos. 1, 2, 3, 4 & 5 Holds, One 5" P&S Deep Tanks.

Main Water Circulating Pump Direct Bilge Suctions, No. and size (One) 10" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size (Two) 5"

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 As Approved.

Are all Sea Connections fitted direct on the skin of the ship No: To cast steel stands. Are they fitted with Valves or Cocks Yes

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 Welded

What Pipes pass through the bunkers None How are they protected ---

What pipes pass through the deep tanks 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 9704 sq. ft.

Which Boilers are fitted with Forced Draft Both Which Boilers are fitted with Superheaters Both

No. and Description of Boilers Two - Babcock & Wilcox W.T. Working Pressure 250 lb. (Spt. 230 lb.)

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 --- Approved Plans

PLANS. Are approved plans forwarded herewith for Shafting in U.K. Main Boilers 17-7-43 Auxiliary Boilers --- Donkey Boilers ---

Superheaters 17-7-43 General Pumping Arrangements 6-7-43 Oil fuel Burning Piping Arrangements 9-7-43

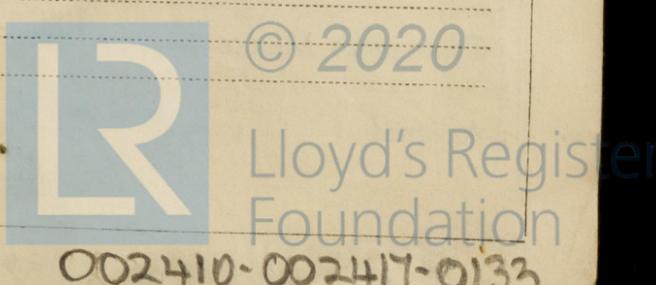
As fitted plan attached. SPARE GEAR.

Is the spare gear required by the Rules been supplied Yes State the principal additional spare gear supplied ---

As per List forwarded with Vancouver Report No. 5942 - S.S. "FORT COLUMBIA"

The foregoing is a correct description
Burrard Dry Dock Company, Limited
[Signature]
President

Manufacturer.



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AFTER PEAK
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During progress of work in shops - - See Montreal Report No. 6071

Dates of Survey while building
 During erection on board vessel - - 1943. Dec. 9, 15, 18, 20, 22, 23. 1944. Jan. 6, 10, 11, 13, 27.
 1944. Feb. 3, 4, 5, 8, 9, 19, 23, 24, 25, 26, 29. March 1, 2, 4, 6, 7, 8.

Total No. of visits 28

Dates of Examination of principal parts—Cylinders Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft See Montreal Report No. 6071 Thrust shaft 27-1-44 Intermediate shafts 27-1-44
 Tube shaft Screw shaft 23-12-43 Propeller 23-12-43
 Stern tube 22-12-43 Engine and boiler seatings 22-12-43 Engines holding down bolts 5-2-44
 Completion of fitting sea connections 22-12-43
 Completion of pumping arrangements 24-2-44 Boilers fixed 13-1-44 Engines tried under steam 23-2-44
 Main boiler safety valves adjusted 23-2-44 Thickness of adjusting washers Lock nuts fitted Lloyd's 8656
 Crank shaft material O.H. Steel Identification Mark 22-12-43 M.D. Thrust shaft material O.H. Steel Identification Mark 7-12-43 M. Lloyd's No. 408
 Intermediate shafts, material O.H. Steel Identification Mark Lloyd's 8523 J:H:N: 16-7-43 8396 J:H:N: 16-7-43 8326 J:H:N: 16-7-43
 Screw shaft, material O.H. Steel Identification Mark Lloyd's 7188 Steam Pipes, material S.D. Steel Test pressure 750 lbs. Date of Test Feb. 9th 1944
 Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes
 Have the requirements of the Rules for the use of oil as fuel been complied with Yes
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Yes If so, have the requirements of the Rules been complied with Yes
 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 S.S. "FORT COLUMBIA" (Vanc. Report No. 5942)

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under special survey of the Montreal Surveyors and installed on board under special survey in accordance with 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 Shipbuilding, Ltd., to ensure that the terms of the specification 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 B with Notation of *L.M.C. 3,44 Screw Shaft C.L. 2 - W.T. Blrs. 250 lb. (Spt. 230 lb.) F.D. Fitted for oil fuel 3,44. Flash point above 150 F.

Montreal fees charged in Montreal Report No. 6071

| | | | |
|------------------------------|----------|---|----------------------------|
| The amount of Entry Fee | \$ | : | When applied for, |
| Special (Ver.) | \$133.00 | : | 8 th Mar., 1944 |
| Donkey Boiler Fee | \$ | : | When received, |
| Travelling Expenses (if any) | \$20.00 | : | 19 |

W.C. Baillie
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute THURS 11 MAY 1944
 Assigned + LMC 3.44

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

Date of writing Report
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 Reg. Book
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