

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 21 JAN 1944

Date of writing Report 26th Nov., 1943 When handed in at Local Office 26th Nov., 1943 Port of Vancouver, B. C.

No. in Survey held at Vancouver, B. C. Date, First Survey 26th June, 1943 Last Survey 19th Nov., 1943

Reg. Book (Number of Visits 27)

on the Steel Single Screw Steamer "FORT ORLEANS"

Tons { Gross 7165.78  
Net 4249.51

Built at Vancouver, B. C. By whom built Burrard Dry Dock Co. Ltd. Yard No. 191 When built 1943

Engines made at Montreal, P.Q. By whom made Canadian Allis Chalmers, Engine No. 249 When made 1943

Boilers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd. Boiler No. S. 550 & 551 When made 1943

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

Nom. Horse Power as per Rule 643 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 24½" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 13.99 14.21 Crank pin dia. 14½" Mid. length breadth -- Thickness parallel to axis 9" & 9½" L.P. (7½" Pin (7½" Journal

Intermediate Shafts, diameter as per Rule 13.33 13.53 Thrust shaft, diameter at collars as per Rule 13.99 14.21

Tube Shafts, diameter as per Rule -- Screw Shaft, diameter as per Rule 14.87 15.07 Is the shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule .75" Thickness between bushes as per Rule .565" 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 Pumps (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 Rams ME

How driven Steam Worthington Simplex Main Bilge Line How driven Duplex - Steam

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 2½" Tunnel Well, One 3" P&S

In Pump Room for'd. & aft cofferdams In Holds, &c. One 3" P&S Nos. 1, 2, 3, 4 & 5 Holds, (One) 4" P&S

No. 1 & No. 2 Deep Tanks, One 5" P&S No. 3 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 Yes

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 Bilge, ballast and 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 lbs. per sq. 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 Shafting in U.K. Main Boilers 17-7-43 Auxiliary Boilers -- Donkey Boilers --

(If not state date of approval)

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

As fitted plan attached.

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 Vancouver Report No. 5942 - S.S. "FORT COLUMBIA"

The foregoing is a correct description  
Burrard Dry Dock Company, Limited

*C. W. Burrard*  
President

Manufacturer.



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Lloyd's Register  
Foundation

005282-003289-0189



Dates of Survey while building

During progress of work in shops - -

See Montreal Report No. 5995

During erection on board vessel - -

1943. June 26. July 3,24. Aug. 25,28. Sept. 13,24,27.

Oct. 2,15,25,27,28. Nov. 1,2,3,4,5,8,10,12,13,15,16,17,18,19.

Total No. of visits 27.

Dates of Examination of principal parts—Cylinders

Slides

Covers

Pistons

Piston Rods

Connecting rods

Crank shaft

Thrust shaft

24-9-43

Intermediate shafts

24-9-43

Tube shaft

Screw shaft

28-8-43

Propeller

28-8-43

Stern tube

25-8-43

Engine and boiler seatings

25-8-43

Engines holding down bolts

24-9-43

Completion of fitting sea connections

25-8-43

Completion of pumping arrangements

12-11-43

Boilers fixed

13-9-43

Engines tried under steam

12-11-43

Main boiler safety valves adjusted

12-11-43

Thickness of adjusting washers

P.Blr. A. 1-7/32" - 1-1/16"

Star. Blr. A. 1-1/4" - 1-1/8"

Crank shaft material O.H. Steel

Lloyd's 8886

Identification Mark 24-8-43 HGS

Thrust shaft material O.H. Steel

Lloyd's 5332

Identification Mark 20-8-43 HGS

Intermediate shafts, material O.H. Steel

Lloyd's 3270

Identification Mark 18-5-43

Tube shaft, material

Lloyd's 3976

Identification Mark 18-4-43

Lloyd's 3940

Identification Mark 18-4-43

Screw shaft, material O.H. Steel

Identification Mark EER 22-4-43

Steam Pipes, material S.D. Steel

Test pressure 750 lbs.

Date of Test 30-10-43

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" (Vcr. 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 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. 11,43 Screw Shaft C.L. 2 - W.T. Blrs. (Spt.) 250 lbs. per sq. inch F.D. Fitted for oil fuel 11,43. Flash point above 150°F.

Montreal fees charged in Montreal Report No. 5995.

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

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+ LMC 11,43



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