

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

21 DEC 1943

Date of writing Report 22nd Oct., 1943 When handed in at Local Office 22nd Oct., 1943 Port of Vancouver, B.C.

No. in Survey held at North Vancouver, B.C. Date, First Survey 25th July, 1943 Last Survey 18th Oct., 1943

Reg. Book. on the Steel Single Screw Steamer "FORT SAKISDAC" (Number of Visits 22) Tons {Gross 7159.62  
Net 4243.93

Built at North Vancouver, B.C. By whom built Burrard Dry Dock Co. Ltd. Yard No. 188 When built 1943

Engines made at Montreal, P.Q. By whom made Dominion Engineering Works Ltd. Engine No. 114 When made 1943

Boilers made at Vancouver, B.C. By whom made Vancouver Iron Works, Ltd. Boiler No. 528 & 531 When made 1943

Registered Horse Power 229 Owner 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 13.99 as per Rule 14.21 for 230 lb. Crank pin dia. 14½" Mid. length breadth -- Thickness parallel to axis 9" & 9½" L.P.

as fitted 14½" Crank webs -- Mid. length thickness -- Thickness around eye-hole 7½" Pin

Intermediate Shafts, diameter 13.33" as per Rule 13.53 for 230 lb. Thrust shaft, diameter at collars 13.99" as per Rule 14.21

as fitted 13.5" as fitted 14.25"

Tube Shafts, diameter -- as per Rule -- Screw Shaft, diameter 14.87" as per Rule 15.07

as fitted -- as fitted 15.25" Is the screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes .75" as per Rule .78125" Thickness between bushes .68" as per Rule .565"

as fitted .78125" as fitted .68" 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 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 4½" 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"x11"x12" Two Rams

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

Ballast Pumps, No. and size One. 10"x11"x12 (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" Tunnell Well. One 3" P & S.

In Pump Room For'd & Aft Cofferdams. In Hold, &c. One 3" P & S Nos. 1, 2, 3, 4, & 5 Holds. One 4" P & S.

Nos. 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 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 & 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 square feet.

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. in. (Sht-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 --

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 --

As Fitted Plan Attached.

SPARE GEAR.

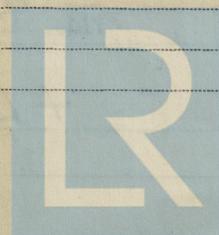
Has the spare gear required by the Rules been supplied Yes

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

Manufacturer.



© 2020

Lloyd's Register  
Foundation

003252-003262-0200



During progress of work in shops - - See Montreal Report No. 5955  
Dates of Survey while building { During erection on board vessel - - -  
July - 25, 26, 27. Aug. - 11, 13, 18. Sept. - 3, 20, 23, 25, 29. &  
Oct. - 1, 2, 5, 6, 7, 9, 13, 14, 15, 16 & 18.  
Total No. of visits 22

See Montreal Report No. 5955.  
Dates of Examination of principal parts - Cylinders Slides Covers  
Pistons Piston Rods Connecting rods  
Crank shaft Thrust shaft 3rd September, 1943. Intermediate shafts 3rd September, 1943.  
Tube shaft Screw shaft 26th July, 1943. Propeller 27th July, 1943.  
Stern tube 25th July, 1943. Engine and boiler seatings 25th July, 1943. Engines holding down bolts 5th October, 1943.  
Completion of fitting sea connections 25th July, 1943.  
Completion of pumping arrangements 25th July, 1943. Boilers fixed 11th Aug., 1943. Engines tried under steam 12th October, 1943.  
Main boiler safety valves adjusted 12th Oct., 1943. Thickness of adjusting washers Compression P. Blr. A. 1 1/2" - 1" Star. F. 1 1/4" - 1-1/32" Lloyd's 8430  
Crank shaft material O.H. Steel Identification Mark Lloyd's 7831 Thrust shaft material O.H. Steel Identification Mark 20-7-43 H.S.  
Intermediate shafts, material O.H. Steel Identification Mark Lloyd's 3870 EER 2-4-43 Lloyd's 3758 EER 29-3-43 Lloyd's 3756 EER 2  
Screw shaft, material O.H. Steel Identification Mark Lloyd's 3743 EER 27-3-43 Lloyd's 3893 EER 3-4-43 Lloyd's 3867 EER 2  
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. Rpt. 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 Surveyor 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 +LMC. 10,43. Screw Shaft C.L. 2 - W.T. Blrs. (Spt) 250 lbs. per sq. in. F.D. Fitted for oil fuel 10,43. Flash point above 150°F.

Montreal fees charged in Montreal Rept. No. 5955.

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

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

FRI. 7 JAN 1944

+ LMC 10.43 2D CL  
2 WTB 250 lb  
(Spt. 230 lb)



© 2020

Lloyd's Register  
Foundation