

RECEIVED
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REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 16 NOV 1943

Date of writing Report 21st Sept. 1943 When handed in at Local Office 21st Sept. 43 Port of VANCOUVER, B.C.

No. in Reg. Book. Survey held at North Vancouver, B. C. Date, First Survey 9th June, 1943 Last Survey 8th Sept. 1943 (Number of Visits 29)

on the Steel Single Screw Steamer, "STRATHCONA PARK" Tons Gross 7156.70 Net 4244.14

Built at North Vancouver, B.C. By whom built BURHARD DRY DOCK COMPANY LIMITED (North No. 184) When built 1943

Engines made at Toronto, Ontario By whom made John Inglis Co. Engine No. 274 496 & When made 1943

Boilers made at Vancouver, B.C. By whom made Vancouver Iron Works, Ltd. Boiler No. s. 497 When made 1943

Registered Horse Power 229 Owners Minister of Munitions & Supply of Canada Mgs. Park Steamship Ltd., Montreal, Que. Port belonging to --

Nom. Horse Power as per Rule 636 628 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 13.99 14.2 as fitted 14-1/4" Crank pin dia. 14-1/4" Crank webs Mid. length breadth -- Thickness parallel to axis 9" & 9 1/2" L.P. (7 1/2" Pin) Mid. length thickness -- sbrunk Thickness around eye-hole (7 3/8" Journal)

Intermediate Shafts, diameter as per Rule 13.33 13.53 as fitted 13.5 Thrust shaft, diameter at collars as per Rule 13.99 14.25 as fitted 14.25

Tube Shafts, diameter as per Rule --- as fitted --- Screw Shaft, diameter as per Rule 14.87 15.07 as fitted 15.25 Is the screw 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 is in more than one length are the junctions made by fusion through the whole thickness of the liner. solid tight fit

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 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 4-1/2" Stroke 26" Can one be overhauled while the other is at work Yes

Feed Pumps (No. and size Two - 12"x8"x24" Pumps connected to the Main Bilge Line (No. and size Four (two) 10"x11"x12" Two Rams 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 2 1/2" Tunnel Well; one 3" P&S

In Engine Room Forward and Aft Cofferdams In Holds, &c. One 3" P&S Nos. 1,2,3,4 & 5 holds; one 4" P&S No. 1 and No.2 Deep Tanks; one 6" 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. Yes, Main injection fitted to steel tube through D.B.A. 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. Yes

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 9,704 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 square inch. (See 230-6)

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 ---

Superheaters 17.7.43 General Pumping Arrangements 6.7.43 Oil fuel Burning Piping Arrangements 9.7.43

SPARE GEAR.

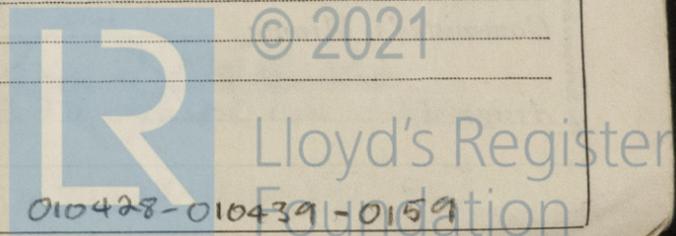
Was the spare gear required by the Rules been supplied Yes

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.

[Signature]
President



March 29th, 1943 and subsequently per British Corporation's Report dated

Dates of Survey while building: During progress of work in shops - June-9-12-17-18-21-30; July-14-17-21-28; Aug.-4,10-16-18-19-20-23-24-26-27-; During erection on board vessel - Aug.-29-30-31; Sept.-1-2-3-4-7 & 8. Total No. of visits 29

EXAMINED BY BRITISH CORPORATION SURVEYORS.

Dates of Examination of principal parts - Cylinders, Slides, Covers, Pistons, Piston Rods, Connecting rods, Crank shaft, Thrust shaft 21st July, 1943, Intermediate shafts 21st July, 1943, Tube shaft, Screw shaft 18th June, 1943, Propeller 18th June, 1943, Stern tube 17th June, 1943, Engine and boiler seatings 17th June, 1943, Engines holding down bolts 21st July, 1943, Completion of fitting sea connections 30th June, 1943, Completion of pumping arrangements 31st August 1943, Boilers fixed 21st July, 1943, Engines tried under steam 1st Sept. 1943, Main boiler safety valves adjusted 31st August, 1943, Thickness of adjusting washers P.Blr. (F) 1-3/16" (A) 1/8"-1-1/32" S.Blr. (F) 1-3/32" (A) 1-3/32" - 1" Lloyd's 4038 EER, Crank shaft material O.H.Steel, Identification Mark Lloyd's 5165B I.J.T. 2-2-43, Thrust shaft material O.H.Steel, Identification Mark Lloyd's 3705 EER 24-3-43; 3707 EER 24-3-43; 3663 EER 19-3-43, Intermediate shafts, material O.H.Steel, Identification Marks Lloyd's 3671 EER 20-3-43; 3714 EER 26-3-43; 3714 EER 25-3-43, Screw shaft, material O.H.Steel, Identification Mark Lloyd's 3715 EER 25-3-43, Steam Pipes, material S.D.Steel, Test pressure 750 lbs., Date of Test 27th Aug., 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.RPT.5942.

The Machinery of this vessel has been constructed under Special Survey of the British Corporation Toronto Surveyors and installed on board under this Society's Special Survey. 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 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.

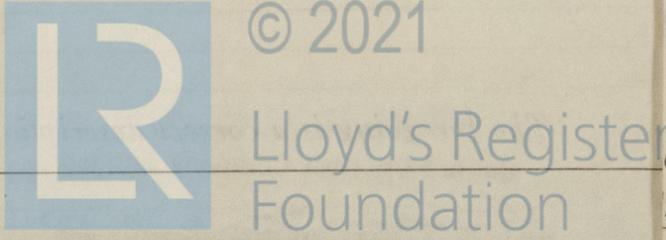
The Machinery of this vessel is eligible in our opinion to be classed in the Register Book with Notation of L.M.C. 9-43, Screw Shaft C.L. 2 - W.T. Blrs. (Spt) 250 lbs. per square inch F.D. Fitted for oil fuel 9-43 Flash point above 150°F.

The amount of Entry Fee \$ 30.00, Special (Brit. Corp) \$267.00, Donkey Boiler Fee \$133.00, Travelling Expenses (Ver) \$ 20.00, " (Brit. Corp) \$ 20.00

13th Sept 43

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

Committee's Minute TUES. 21 DEC 1943, Assigned See p. machy rpt.



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