

RECEIVED
23 MAR 1944
IN D.O.

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

23 MAR 1944

Date of writing Report 27th Jan., 1944 When handed in at Local Office 27th Jan., 1944 Port of Vancouver, B. C.
No. in Survey held at Vancouver, B. C. Date, First Survey 29th Oct., 1943 Last Survey 26th Jan., 1944
Reg. Book (Number of Visits 30)

on the Steel Single Screw Steamer "GREEN HILL PARK" Tons {Gross 7167.75
Net 4247.38
Built at Vancouver, B.C. By whom built Burrard Dry Dock Co. Ltd. Yard No. 197 When built 1944
Engines made at Toronto, Ont. By whom made John Inglis Co. Ltd. Engine No. 285 When made 1944
Boilers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd. Boiler Nos. 579 & 580 When made 1944
Registered Horse Power 229 Owners Minister of Munitions & Supply of Canada belonging to Montreal, P.Q.
Mgrs. - (Park Steamship Co. Ltd.)
Nom. Horse Power as per Rule 643 628 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 ✓ Crank pin dia. 14 1/2" ✓ Crank webs Mid. length breadth --- Thickness parallel to axis 9" & 9 1/2" L.P.
as fitted 14 1/2" ✓ Mid. length thickness --- sbrunk Thickness around eye-hole 7 1/8" Pin
Intermediate Shafts, diameter as per Rule 13.53 ✓ Thrust shaft, diameter at collars as per Rule 14.21" ✓
as fitted 13.5 ✓ as fitted 14.25" ✓
Tube Shafts, diameter as per Rule --- Screw Shaft, diameter as per Rule 15.07" ✓ Is the shaft fitted with a continuous liner { ---
as fitted --- 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" ✓ Thickness between bushes as per Rule .565" ✓ Is the after end of the liner made watertight in the
as fitted .78125 ✓ as fitted .68" ✓ 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 Continuous ✓
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" ✓ 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 (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. ✓
In Pump Room 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 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 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 ---

PLANS. Are approved plans forwarded herewith for Shafting in U.K. Approved Plans 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. Manufacturer.
[Signature]
President



Dates of Survey while building

During progress of work in shops - - **March 29th, 1943 and subsequently per British Corporation Report dated 16-11-43 attached herewith.**

During erection on board vessel - - **1943. Oct. 29, 30. Dec. 6, 9, 10, 13, 15, 18, 20, 21, 22, 24, 29, 30, 31. Jan. 3, 5, 8, 11, 13, 14, 18, 19, 20, 21, 22, 23, 24, 25, 26.**

Total No. of visits **30**

Dates of Examination of principal parts - Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft **Examined by British Corporation Surveyors** Thrust shaft **18th December, 1943** Intermediate shafts **18th December, 1943**

Tube shaft Screw shaft **30th October, 1943** Propeller **30th October, 1943**

Stern tube **29th October, 1943** Engine and boiler seatings **29th October, 1943** Engines holding down bolts **18th December, 1943**

Completion of fitting sea connections **30th October, 1943**

Completion of pumping arrangements **14th January, 1944** Valves fixed **6th Dec., 1943** Engines tried under steam **13th January, 1944**

Main boiler safety valves adjusted **13th January, 1944** Thickness of adjusting washers Lock nuts fitted.

Crank shaft material **O.H. Steel** (Lloyd's 6479 (WFM 31-8-43) Identification Mark BC Thrust shaft material **O.H. Steel** Lloyd's 5531 Identification Mark EER 5-10-43

Intermediate shafts, material **O.H. Steel** Lloyd's 8474 JHN 29-6-43 8451 JHN 25-6-43 8448 JHN 25-6-43 Identification Marks 8492 JHN 29-6-43 8454 JHN 25-6-43 8445 JHN 25-6-43

Screw shaft, material **O.H. Steel** Lloyd's 5342 Identification Mark EER 27-5-43 Steam Pipes, material **S.D. Steel** Test pressure **750 lbs.** Date of Test **26-12-43**

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" (Vancouver 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 British Corporation Toronto Surveyors and installed on board under this Society's 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 installation on behalf of Wartime Shipbuilding, 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.* 1,44 Screw Shaft C.L. 2 - W.T. Blrs. 250 lb. (Spt. 230 lb.) F.D. Fitted for oil fuel 1,44. Flash point above 150°F.

British Corporation Certificate dated 16th November, 1943 attached.

The amount of Entry Fee ... \$ 30.00

Special (Brit. Corp.) \$ 267.00

" L.R. (Ver.) 133.00

Donkey Boiler Fee ... \$

(L.R. (Ver.)) \$ 20.00

Travelling Expenses (if any) (Brit. Corp.) \$ 20.00

When applied for, 25th Jan, 44

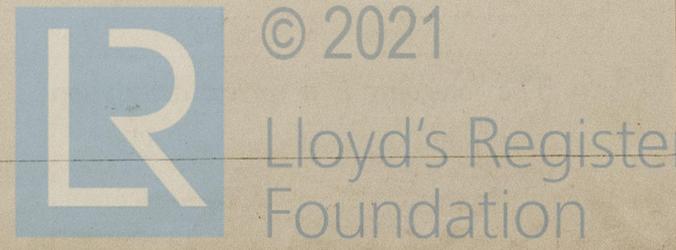
When received, 19

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

FRI. 14 APR 1944

Committee's Minute

Assigned *LMC* 1,44 subject 2D Cl. 2 WTB 250 lb (220 lb)*



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

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