

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report **30th Sept., 1944** When handed in at Local Office **30th Sept., 1944** Port of **Vancouver, B. C.**
 No. in Survey held at **Vancouver, B. C.** Date, First Survey **6th July, 1944** Last Survey **27th September, 1944**
 Reg. Book (Number of Visits **26**)
 on the **Steel Single Screw Steamer "MOHAWK PARK" (Launched as "KOOTENAY PARK")** Tons {Gross **7162.75**
 Net **4219.00**
 Built at **Vancouver, B. C.** By whom built **Burrard Dry Dock Co. Ltd.** Yard No. **217** When built **1944**
 Engines made at **Lachine, P. Q.** By whom made **Canadian Allis-Chalmers Ltd.** Engine No. **374** When made **1944**
 Boilers made at **Vancouver, B. C.** By whom made **Vancouver Iron Works, Ltd.** Boiler No. **721-722** When made **1944**
 Registered Horse Power **229** Owners **Minister of Munitions & Supply of Canada (Mgrs. Park Steamship Co. Ltd.)** Port belonging to **Montreal, P. Q.**
 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** for 230 lb. 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 **-** Thickness around eye-hole **7 1/2" Pin**
 Intermediate Shafts, diameter as per Rule **13.53** for 230 lb. Thrust shaft, diameter at collars as per Rule **14.21** **7 1/2" Journal**
 as fitted **13.5** as fitted **14.25**
 Tube Shafts, diameter as per Rule **15.07** Is the **nut** shaft fitted with a continuous liner **-**
 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"**
 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 **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**
 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 **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 strands.** Are they fitted with Valves or Cocks **Yes**
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokebold 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 **(S)**) 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 **Approved Plans 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.

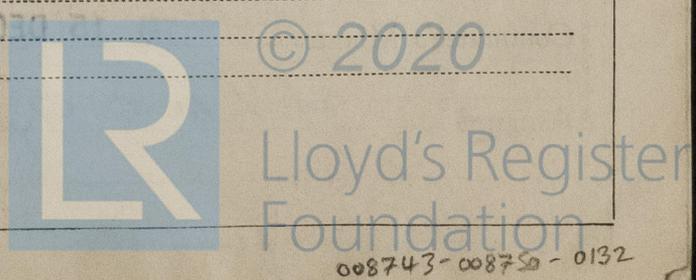
SPARE GEAR.
 Has the spare gear required by the Rules been supplied **Yes**
 State the principal additional spare gear supplied **-**

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

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

[Signature]
 President

Manufacturer.



See Montreal Report No. 6234

Dates of Survey while building

During progress of work in shops - - - 1944 July 6, 7, 18, 24, 26, 27, 28, 31 Aug. 2, 3, 8, 10, 12, 16, 24, 25, 29

During erection on board vessel - - - Sept. 12, 18, 19, 20, 21, 23, 25, 26, 27

Total No. of visits 26

Dates of Examination of principal parts — Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft 3 - 8 - 44 Intermediate shafts 3 - 8 - 44

Tube shaft Screw shaft 7 - 7 - 44 Propeller 7 - 7 - 44

Stern tube 6 - 7 - 44 Engine and boiler seatings 6 - 7 - 44 Engines holding down bolts 10 - 8 - 44

Completion of fitting sea connections 6 - 7 - 44

Completion of pumping arrangements 19 - 9 - 44 Boilers fixed 18 - 7 - 44 Engines tried under steam 12 - 9 - 44

Main boiler safety valves adjusted 12 - 9 - 44 Thickness of adjusting washers Lock nuts fitted

Crank shaft material O.H. Steel Identification Mark HGLP 5-6-44 Thrust shaft material O.H. Steel Identification Mark HGLP 6-6-44

Intermediate shafts, material O.H. Steel Identification Marks Lloyd's No. 1801 EER 29-1-43 Lloyd's No. 3615 EER 16-3-43 Lloyd's No. 3613 EER 16-3-43

Screw shaft, material O.H. Steel Identification Mark Lloyd's No. 7913 EER 29-11-43 Steam Pipes, material S.D. Steel Test pressure 750 lbs. Date of Test 2-8-44

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 No If so, have the requirements of the Rules been complied with - -

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 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. 9,44 Screw Shaft C.L. 2 - W.T. Blrs. 250 lb. (Spt. 230 lb.) F.D. Fitted for oil fuel 9,44. Flash point above 150°F. subject to the mast head and sidelight wiring and all other P.V.C. cables fitted on deck, being examined within two years before the end of 9,46

Montreal fees charged in Montreal Report No. 6234.

The amount of Entry Fee ... \$: When applied for,

Special (Ver.) ... \$133.00 : 27th Sept 1944

Donkey Boiler Fee ... \$: When received,

Travelling Expenses (if any) \$ 20.00 : 19

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

Committee's Minute FRI. 15 DEC 1944

The Assigned + LMC 9.44 subject.



Certificate to be sent to

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