

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

30 AUG 1943

Date of writing Report **15th July, 1943** When handed in at Local Office **15th July, 1943** Port of **Vancouver, B. C.**

No. in Survey held at **North Vancouver, B. C.** Date, First Survey **25th May, 1943** Last Survey **9th July, 1943**

Reg. Book. **---** on the **Steel Single Screw Steamer "GREEN GABLES PARK"** (Number of Visits **24**)

Gross Tons **7131.89**
Net Tons **4245.33**

Built at **North Vancouver, B.C.** By whom built **North Van Ship Repairs, Ltd.** Yard No. **126** When built **1943**

Engines made at **Lachine, Que.** By whom made **Dominion Engineering Works, Ltd.** Engine No. **97** When made **1943**

Boilers made at **Vancouver, B. C.** By whom made **Dominion Bridge Co. Ltd.** Boiler No. **(470, 475, 480)** When made **1943**

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

Nom. Horse Power as per Rule **504** **505** 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 575° F.** Revs. per minute **80**

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"** as fitted **14½"** Crank pin dia. **14½"** Crank webs Mid. length breadth **---** Thickness parallel to axis **9" & 9½" L.P.**
as fitted **14½"** Mid. length thickness **---** sbrunk Thickness around eye-hole **(7½" Pin, 7½" Journal)**

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

Tube Shafts, diameter as per Rule **---** as fitted **---** Screw Shaft, diameter as per Rule **14.87"** as fitted **15.25"** Is the ^{tube}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**

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 **4½"** Stroke **26"** Can one be overhauled while the other is at work **Yes**

Feed (No. and size **Two- (10"x7"x24")** Pumps connected to the Main Bilge Line { No. and size **Four (One) 10"x12"x10" (One) 9"x6"x10" Two Rams**
Pumps (How driven **Steam Weir Simplex type** How driven **Duplex Steam Duplex Steam M.E.**

Ballast Pumps, No. and size **(One) 10"x12"x10" (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 **1-3" Dia. Port, 1-3" Dia. Star^{bd} in Blr. Rm., 1-3" Dia. Port, 1-3" Dia. Star^{bd}**
In Pump Room **1-2½" Dia. in tunnel well. In Eng. Rm., 1-2" Dia. in Thrust Recess. In Holds, &c. 1-4" Dia. to F.P., 1-3" Dia. P&S to Nos. 1-2-3-4 & 5**

Holds, **1-4" Dia. to A.P.**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **(One) 9"** Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **(One) 5" Dia. Star^{bd} side** 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. tank.** 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 **Steel air pipes to No. 4 D.B. tanks** How are they protected **Steel straps welded across frames. Under Limber Boards.**

What pipes pass through the deep tanks **No. 7 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 **7140** sq. ft.

Which Boilers are fitted with Forced Draft **All Three** Which Boilers are fitted with Superheaters **All Three**

No. and Description of Boilers **3 Single ended multitubular** Working Pressure **220** 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 **Approved Plans in U.K.** Main Boilers Auxiliary Boilers Donkey Boilers

(If not state date of approval)

Superheaters **Approved Plans in U.K.** General Pumping Arrangements Oil fuel Burning Piping Arrangements

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. 5718 - S.S. "FORT ST. JAMES"

The foregoing is a correct description

[Signature]
NORTH VAN SHIP REPAIRS LIMITED
Assistant Manager.



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Dates of Survey while building

During progress of work in shops - - } See Montreal Report No. 5855

During erection on board vessel - - - } 1943. May 6, 8, June 1, 3, 5, 7, 8, 11, 12, 14, 16, 18, 19, 21, 29, 30.
10, 13, 25.

July 1, 2, 3, 7, 9.

Total No. of visits 24

Dates of Examination of principal parts - Cylinders

Pistons Piston Rods Slides Covers

Crank shaft See Montreal Report No. 5855 Connecting rods

Tube shaft Thrust shaft 21st June, 1943 Intermediate shafts 21st June, 1943

Stern tube 8th May, 1943 Screw shaft 6th May, 1943 Propeller 10th May, 1943

Engine and boiler seatings 13th June, 1943 Engines holding down bolts 21st June, 1943

Completion of fitting sea connections 13th May, 1943

Completion of pumping arrangements 3rd July, 1943 Boilers fixed 13th June, 1943

Main boiler safety valves adjusted 30th June, 1943 Thickness of adjusting washers P.Blr. 23/32 30th June, 1943
G.Blr. 5/8 35/64 Sup. 2-3/16
S.Blr. 35/64 35/64 2-3/16

Crank shaft material O.H. Steel Lloyd's Identification Mark 6571 Thrust shaft material O.H. Steel Lloyd's 38150 H.S.

Intermediate shafts, material O.H. Steel Lloyd's Identification Mark 11-5-43 H.S.

Screw shaft, material O.H. Steel Lloyd's Identification Mark 8068 1719 22-1-43 EER 1791 28-1-43 1766 25-1-43 EER
1761 22-1-43 EER 1772 25-1-43 8000 8-1-43 PWW

Is an installation fitted for burning oil fuel No 19-2-43 TM Steam Pipes, material S.D. Steel Test pressure 660 lbs. Date of Test 25th May

Have the requirements of the Rules for the use of oil as fuel been complied with -- Is the flash point of the oil to be used over 150°F. --

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 --

Is this machinery duplicate of a previous case Yes -- If so, state name of vessel S.S. "FORT ALEXANDRIA" (Ver. Rpt. No. 5755)

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 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 *L.M.C. 7,43 Screw Shaft C.L. 3 S.B. (Spt.) 220 lbs. F.D.

Montreal fees charged in Montreal Report No. 5855

The amount of Entry Fee ... £ : :
Special (Ver.) ... \$133.00 : :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) \$ 20.00 : :
When applied for, 8th July, 1943
When received, 19

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

Committee's Minute FRI. 3 SEP 1943

Assigned +LMC 7.43 S.M. 30. CL

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