

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 2 DEC 1942

Date of writing Report May 15th 1942 When handed in at Local Office May 15th 1942 Port of MONTREAL, QUE.

No. in Survey held at LACHINE, MONTREAL, P. Q. Date, First Survey 12th March Last Survey 24th April 1942
 Reg. Book. (Number of Visits 30)

on the STEEL SINGLE SCREW STEAMER "FORT LIARD" Tons ^{Gross} _____ _{Net} _____

Built at VICTORIA - BC By whom built MESSRS. VICTORIA MACHINERY DEPOT LIMITED Yard No. 22 When built 1942

Engines made at Lachine, P. Q. By whom made Dominion Engineering Works Ltd. Engine No. 26 When made 1942

Boilers made at _____ By whom made _____ Boiler No. _____ When made _____

Registered Horse Power _____ Owners _____ 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 _____

ENGINES, &c.—Description of Engines Triple Expansion 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 14.07 ^{14.00} Crank pin dia. 14 1/2" Mid. length breadth _____ Thickness parallel to axis 9" & 9 1/2" I.P.
 as fitted 14 1/2" Crank webs _____ Mid. length thickness _____ Thickness around eye-hole 7-1/8" Pin
 as per Rule 13.2 ^{13.32} Thrust shaft, diameter at collars as per Rule 13.82 ^{14.00} 7-5/8" Journal
 as fitted 13.5 as fitted 14.25

Intermediate Shafts, diameter as per Rule _____ as fitted _____

Tube Shafts, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule 14.875 ^{14.86} Is the ^{tube} screw shaft fitted with a continuous liner Yes
 as fitted _____ as fitted 15.25

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 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
 as fitted .78125" as fitted .68" 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) _____ Pumps connected to the Main Bilge Line (No. and size) _____
 Pumps (How driven) _____ Main Bilge Line (How driven) _____

Ballast Pumps, No. and size _____ Lubricating Oil Pumps, including Spare Pump, No. and size _____

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 _____
 In Pump Room _____ In Holds, &c. _____

Main Water Circulating Pump Direct Bilge Suctions, No. and size _____ Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes _____

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 _____

Are all Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the Overboard Discharges above or below the deep water line _____

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel _____ Are the Blow Off Cocks fitted with a spigot and brass covering plate _____

What Pipes pass through the bunkers _____ How are they protected _____

What pipes pass through the deep tanks _____ Have they been tested as per Rule _____

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times _____

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 _____ Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 7140 square feet

Which Boilers are fitted with Forced Draft Yes Which Boilers are fitted with Superheaters All three

No. and Description of Boilers 3 Single Ended Multitubular Working Pressure 220 lbs. per square 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 _____ Main Boilers _____ Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)

Superheaters _____ General Pumping Arrangements _____ Oil fuel Burning Piping Arrangements _____

SPARE GEAR.

Has the spare gear required by the Rules been supplied _____

State the principal additional spare gear supplied _____

The foregoing is a correct description

Dominion Engineering Works Ltd Manufacturer.
per Allan Pattee

12, 14, 16, 17, 19, 20, 23, 25, 26, 27, 30th March 1942; 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 15, 16, 18, 20, 21,

Dates of Survey while building } During progress of work in shops - - } 23, 24th April, 1942.

During erection on board vessel - - - }
Total No. of visits

Dates of Examination of principal parts - Cylinders 7-4-42, 1-4-42, 20-4-42 Slides 7-4-42, 1-4-42, 20-4-42 Covers 7-4-42, 1-4-42, 20-4-42

Pistons 7-4-42, 1-4-42, 20-4-42 Piston Rods 24-4-42 Connecting rods 24-4-42

Crank shaft 24-4-42 Thrust shaft Intermediate shafts

Tube shaft Screw shaft Propeller

Stern tube Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Crank shaft material D H S Identification Mark 3237 H S Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks 24-4-42 Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test

Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. - - -

Have the requirements of the Rules for the use of oil as fuel been complied with - - -

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo 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 TADOUSSAC" and S/S "FORT CHAMBLAY"

General Remarks (State quality of workmanship, opinions as to class, &c. This ENGINE has been constructed under Special Survey

in accordance with the Rules and Approved Plans. The materials and workmanship are good. The cylinders were tested hydrostatically to 330, 110 and 30 lbs. pressure per square inch respectively, and found tight under those pressures.

This ENGINE has now been shipped to MESSRS. VICTORIA MACHINERY DEPOT LIMITED, VICTORIA, B.C., for installation and official trials. It is recommended for the favourable consideration of the Committee that the record of * L.M.C. (with date) be made in the Register Book in the case of this Vessel, subject to satisfactory installation and sea trials.

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

The amount of Entry Fee ... £ \$ 30.00 :
Special ... £ 267.00 :
Donkey Boiler Fee ... £ :
Travelling Expenses (if any) £ 25.00 :
When applied for, 15.9.42
When received, ✓ 19.

R. B. Alkiddell & H. J. Saunders
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 8 DEC 1942

Assigned See Ver No 5809

