

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 11 JUN 1944

Date of writing Report Jan. 19th 1944 When handed in at Local Office Dec. 22nd 1943 Port of MONTREAL, QUE.
 No. in Survey held at MONTREAL, QUE. Date, First Survey Nov. 8th Last Survey December 20th 1943
 Reg. Book Single Screw Steamer "WILLOWDALE PARK" (Number of Visits Constant attendance) Tons {Gross 7243.01 Net 4163.11
 on the
 Built at Vancouver, B. C. By whom built West Coast Shipbuilders, Ltd. Yard No. 136 When built
 Engines made at LACHINE, P. Q. By whom made DOMINION ENGINEERING WORKS LIMITED Engine No. 146 When made 1943
 Boilers made at _____ By whom made _____ Boiler No. _____ When made _____
 Registered Horse Power _____ Owners _____ Port belonging to _____
 Nom. Horse Power as per Rule 645 678 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 13.99" 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 7.125
 Intermediate Shafts, diameter as per Rule 13.33" Thrust shaft, diameter at collars as per Rule 13.99"
 as fitted 13.5" as fitted 14.25"
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 14.87" Is the screw shaft fitted with a continuous liner { _____
 as fitted _____ as fitted 15.25" 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 Solid
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 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 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 (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. _____

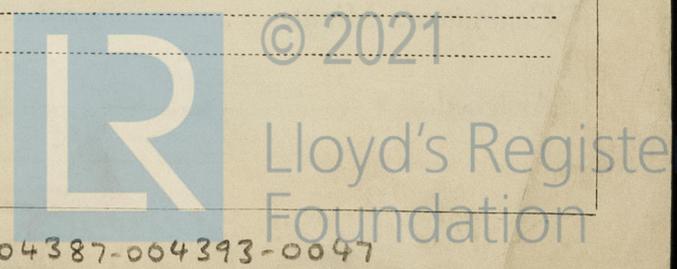
Main Water Circulating Pump Direct Bilge Suctions, No. and size _____ Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size _____ Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes _____
 Are the Bilge Suctions in the Machinery Space led from easily 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 _____) Total Heating Surface of Boilers _____
 Which Boilers are fitted with Forced Draft _____ Which Boilers are fitted with Superheaters _____
 No. and Description of Boilers _____ Working Pressure _____
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? _____
 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 LIMITED
 Per H. Williams

Manufacturer.



Constant attendance from 8th November, to December 20th, 1943 -

Dates of Survey while building

During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits

Constant attendance

Dates of Examination of principal parts - Cylinders 9.12.43 Slides 17.12.43 Covers 17.12.43

Pistons 17.12.43 Piston Rods 17.12.43 Connecting rods 17.12.43

Crank shaft 17.12.43 Thrust shaft 7.12.43 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 O H Steel Identification Mark LLOYD'S 409 M.D. 17.12.43 Thrust shaft material O H Steel Identification Mark LLOYD'S M.D. 8814

Intermediate shafts, material Identification Marks 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" & S/S "FORT CHAMBLAIN"

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 been fitted with CAST STEEL Connecting Rods.

The ENGINE has now been shipped to VANCOUVER, 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 ... \$:00
Travelling Expenses (if any) \$ 13:00
When applied for, Jan 24 1944 RR
When received, 15.3.44 VCR

M. Dickson
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 13 JUN 1944
Assigned See p. mach, etc

