

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report **No. 11th 42** When handed in at Local Office **Nov. 11th 42** Port of **MONTREAL, QUE.**
 No. in Survey held at **MONTREAL, QUE.** Date, First Survey **Quebec 22nd May 1942** Last Survey **21st Nov 1942**
 Reg. Book. **30** (Number of Visits **33**) Quebec **33**
 on the **Single Screw Steamer "FORT CONCORD"** Tons Gross **7138.31** Net **4245.41**
 Built at **LAUZON, LEVIS, P.Q.** By whom built **DAVIE SHIPBUILDING & REPAIRING CO. LTD.** Yard No. **539** When built **1942**
 Engines made at **LACHINE, P. Q.** By whom made **DOMINION ENGINEERING WORKS LTD.** Engine No. **46** When made **1942**
 Boilers made at **Lachine, P. Q.** By whom made **Dominion Bridge Co. Ltd.** Boiler No. **B968/S1, B968/C1, B968/P1** When made **1942**
 Registered Horse Power **504** Owners **Ministry of War Transport** Port belonging to **Montreal**
 Nom. Horse Power as per Rule **504** 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 1/4"** Mid. length breadth **--** Thickness parallel to axis **9" & 9 1/2" L.P.**
 as fitted **14 1/4"** Crank webs **--** 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 **2 1/2"** 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**
 as fitted **.78125"** as fitted **.68"** 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**
 Propeller, dia. **18'-6"** Pitch **16'-0"** No. of Blades **4** Material **Bronze** whether Moveable **Solid** Total Developed Surface **117** sq. ft.
 Length of Bearing in Stern Bush next to and supporting propeller **61"**
 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 10 1/2" x 8" x 22"** Pumps connected to the Main Bilge Line { No. and size **Three: Two 4 1/2" rams, one 10" x 12" x 10"**
 How driven **Weirs Steam driven** How driven **Two Main Engine, one duplex steam**
 Ballast Pumps, No. and size **One 10" x 12" x 10"** 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 **E.R. three x 3", one x 5", one x 9" B.R. two x 3"**
 In Pump Room **--** In Holds, &c. **No. 1, 2, 3, 4, & 5 each one x 3" p&s, Deep tanks p&s one each 6", after tunnel well one 2 1/2", F.P. & A.P. on ballast range one each 4"**
 Main Water Circulating Pump Direct Bilge Suctions, No. and size **one x 9"** Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **Starboard one x 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 **Yes, except main injection** Are they fitted with Valves or Cocks **7 valves, 2 cocks**
 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 **Yes**
 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 **P&s steel bilge lines to No. 1, 2, 3** How are they protected **By bilge covering boards**
 What pipes pass through the deep tanks **None** 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 **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 **7140 square feet**
 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 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 **Yes**
 State the principal additional spare gear supplied **--**

NOTE.—The words which do not apply should be deleted.

Is a Report also sent on the Hull of the Ship? **Yes**

If not, state whether, and when, one will be sent? **Yes**

The foregoing is a correct description
 Dominion Engineering Works Ltd. Manufacturer.
 per A. Van Datten



8800-8111

30th June, 1942, 2,3,6,7,8,9,10,11,14,15,16,17,18,20,21,22,24,25,27,28,30,31st July, 1942,

Dates of Survey while building
 During progress of work in shops - - - 1,3,6,7,8,10,11th August, 1942.
 During erection on board vessel - - - 22,25,28th May, 5,13,22,27,30th June, 2,4,13,21,23 July, 5,13,22, 26 Aug., 2,4,12,19,24 Sept. 5,10,17,22,24 Oct. 3,10,16,17,20,21 Nov.
 Total No. of visits Montreal - 30. Quebec - 33.

Dates of Examination of principal parts - Cylinders 17.7.42, 28.7.42, 31.7.42 Slides 17.7.42, 28.7.42, 31.7.42 Covers 17.7.42, 28.7.42, 31.7.42
 Pistons 17.7.42, 28.7.42, 31.7.42 Piston Rods 11.8.42 Connecting rods 11.8.42
 Crank shaft 11.8.42 Thrust shaft 11.8.42 Intermediate shafts 6 at 8.5.42
 Tube shaft - Screw shaft 8.5.42 Propeller 21.8.42 No. 90 5759 J.B.F.
 Stern tube 8.10.42 Engine and boiler seatings 21.9.42 Engines holding down bolts 3.11.42
 Completion of fitting sea connections 8.10.42
 Completion of pumping arrangements 13.11.42 Boilers fixed 20.10.42 Engines tried under steam 16.11.42
 Main boiler safety valves adjusted 13.11.42 Thickness of adjusting washers P.11/32" & 9/16" C.15/32" & 17/32" S.7/16" & 1/8"
 Crank shaft material O.H Steel Identification Mark Lloyd's 3881 H.S. 11.8.42 Thrust shaft material O.H Steel Identification Mark Lloyd's 5473 H.S. 11.8.42
 Intermediate shafts, material Identification Marks See below Tube shaft, material - Identification Mark
 Screw shaft, material Identification Mark 4041, IJT Steam Pipes, material S.D.H.R.S. Test pressure 660 Date of Test 6.11.42
 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. 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 TADOUSSAC" & 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. DAVIE SHIPBUILDING & REPAIRING CO. LIMITED, LAUZON, LEVIS, P. Q., 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.

The machinery of this vessel has now been properly fitted on board and on completion tried under full working conditions and found satisfactory. The safety valves have been adjusted under steam and tested for accumulation. In my opinion this vessel is eligible for record of LMC 11.42

Intermediate shafting Identification Marks.
 5299, 5285, 5288, 5248, 5185, 5298, All 8.5.42 I.J.T.

The amount of Entry Fee ... £ 30.00
 Special ... £ 400.00
 Donkey Boiler Fee ... £ :
 Travelling Expenses (if any) £ :
 Included in Hull Rpt.

H. J. Saunders & D. Falkett
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 12 JAN 1943
 Assigned + L.M.C. 11.42
 22, C.L.

The Surveyors are requested not to write on or below the space for Committee's Minute.
 11.5.42
 S.S.O.F. re Fort Colaracou (MH. 5751)