

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office. 16 MAR 1944

Date of writing Report 30th. June 1943 When handed in at Local Office. 23rd. June 1943 Port of Montreal

No. in Survey held at Three Rivers, P.Q. Montreal: 27th. April Last Survey 12th. June 1943  
 Reg. Book. St. John; 1st Visit Sept. 9/42 Last visit Jan. 24/44  
 (Number of Visits 70)

on the S.S. "FAWKNER PARK" Tons {Gross 2882  
 Net

Built at Saint John, N.B. By whom built Saint John Dry Dock & Shipbuilding Company, Limited Yard No. When built 1943

Engines made at Three Rivers, P.Q. By whom made Canada Iron Foundries Ltd. Engine No. 2011 When made 1943

Boilers made at Lachine, P.Q. By whom made Dominion Bridge Co. Ltd. Boiler No. B1147 S3 When made 1943

Registered Horse Power --- Owners Canadian Government Port belonging to ---

Nom. Horse Power as per Rule 268.81 269 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which Vessel is intended Ocean Going

ENGINES, &c.—Description of Engines Triple Expansion Three Cylinders Revs. per minute 72 ✓

Dia of Cylinders 20" 31" 55" Length of Stroke 39" ✓ No. of Cylinders 3 ✓ No. of Cranks 3 ✓

Crank shaft, dia. of journals as per Rule 10.99" ✓ as fitted 11.25" ✓ Crank pin dia. 11.25" ✓ Crank webs Mid. length breadth 16.25" ✓ Thickness parallel to axis 6.875" ✓

Intermediate Shafts, diameter as per Rule 10.47" ✓ as fitted 10.75" ✓ Thrust shaft, diameter at collars as per Rule 10.99" ✓ as fitted 11.25" ✓

Tube Shafts, diameter as per Rule --- as fitted --- Screw Shaft, diameter as per Rule 11.78" ✓ as fitted 12.25" ✓ Is the screw shaft fitted with a continuous liner? Yes ✓

Bronze Liners, thickness in way of bushes as per Rule .657" ✓ as fitted .6875" ✓ Thickness between bushes as per Rule .493" ✓ as fitted .53125" ✓ Is the after end of the liner made watertight in the propeller boss. Yes

Propeller, dia. 15.75" ✓ Pitch 14.0" ✓ No. of Blades 4 ✓ Material Bronze whether Moveable No ✓ Total Developed Surface --- sq. ft.

Feed Pumps worked from the Main Engines, No. 2 ✓ Diameter 3" ✓ Stroke 26" ✓ Can one be overhauled while the other is at work Yes ✓

Bilge Pumps worked from the Main Engines, No. 2 ✓ Diameter 4.25" ✓ Stroke 26" ✓ Can one be overhauled while the other is at work Yes ✓

Feed (No. and size) 1. 8"-6"-15"; 2. 3"-26" Pumps connected to the { No. and size 2. 4.25"x26"; 1. 10"-11"-10" ✓  
 How driven Steam; Main Engines; Main Bilge Line { How driven Main Engines; Steam ✓

Ballast Pumps, No. and size 1. 10"-11"-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 Engine Room P.2. 3": S.F.R. 1. 4": Boiler Room P.1-3": S.1-3" ✓  
 In Pump Room --- In Holds, &c. No.1 Hold P.1-3": S.1-3": No.2 Hold P.1-3": S.1-3" ✓  
 No.3 Hold For'd P.1-2.5": S.1-2.5": No. 3 Hold Aft P.1-2.5": S.1-2.5" ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1.6" ✓ Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size S.1-4": P.1-3" ✓ 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. No ✓ Are they fitted with Valves or Cocks. Valves and 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. ✓  
 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. None ✓ 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. 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 3854 Square Feet ✓

Which Boilers are fitted with Forced Draft Port & Stbd. ✓ Which Boilers are fitted with Superheaters Port & Stbd. ✓

No. and Description of Boilers 2 - Multitubular Scotch Boilers Working Pressure 200 lbs./ Square Inch ✓

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes ✓

IS A DONKEY BOILER FITTED? --- 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 London Main Boilers Approved New York Auxiliary Boilers --- Donkey Boilers ---  
 (If not state date of approval)

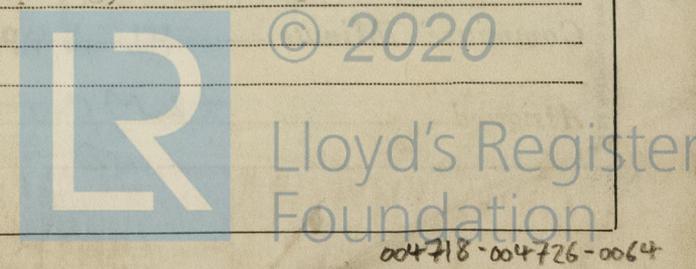
Superheaters --- General Pumping Arrangements --- Oil fuel Burning Piping Arrangements ---

SPARE GEAR.

Is the spare gear required by the Rules been supplied Yes ✓

State the principal additional spare gear supplied. Main Condenser: 25 tubes, 50 ferrules, 100 pieces of condenser tube packing, one tap for tube plate, 1 die for condenser ferrules, 1 guide pin for packing, 1 packing expander, one ferrule driver, one tube driver. Main Engines: 3 sets of wearing segments of King taper packing for H.P., I.P., and L.P. valve spindles. Boilers: 10 plain boiler tubes, 2 stay tubes, 2 of each - dead plates, bearer plates and bridge plates, 2 safety valve springs, 1 pressure gauge, 1 tube expander. Forced Draught: 3 baffle plates, 1 furnace door complete, 2 ash pit doors complete, 2 air valves complete, 14 retarders. Superheaters: 2 header drain valves, 96 flexible unit gaskets, 1 set of tools. Telemotor: 1 box containing assorted valve springs, packing rings, copper joints, 1 set of S.E.A. ring packing, 1 set of tools. Steering Engine: 1 set of brasses for main bearing, bottom end and crosshead, 2 piston rings; 1 buffer complete with spring, 1 set of piston rod and valve spindle packing.

The foregoing is a correct description  
 CANADA IRON FOUNDRIES LIMITED  
 PER: *W. J. ...* Superintendent. Manufacturer.



Constant Attendance - from April 27th. 1943 to June 12th. 1943. (47 days)

Dates of Survey while building  
 During progress of work in shops - - - 1943: Sept. 9; 1943: June 17; July 10, 14, 17; Aug. 21; Sept. 30; Oct. 15, 19, 21;  
 During erection on board vessel - - - Nov. 2, 5, 22; Dec. 2, 6, 14, 15, 31; 1944: 10, 10, 12, 21, 24.  
 Total No. of visits Montreal 47; Saint John 23 = Total 70

Dates of Examination of principal parts - Cylinders 28-5-43 8-6-43 Slides 5-5-43 8.6.43 Covers 8-5-43 2-6-43  
 Pistons 6-5-43 10-5-43 8-6-43 Piston Rods 10-5-43 14-5-43 8-6-43 Connecting rods 13-5-43 21-5-43 25-5-43  
 Crank shaft 6-5-43 11-5-43 20-5-43 Thrust shaft 11-5-43 26-5-43 Intermediate shafts --- 30-9-43  
 Tube shaft --- Screw shaft --- 10-7-43 Propeller --- 14-7-43  
 Stern tube --- 10-7-43 Engine and boiler seatings --- 1-10-43 Engines holding down bolts --- 14-12-43  
 Completion of fitting sea connections 10-7-43

Completion of pumping arrangements 15/1/44 Boilers fixed 3-1-44 Engines tried under steam 27/1/44  
 Port Starboard  
 Main boiler safety valves adjusted Stbd. 10-1-44; 11-1-44 Thickness of adjusting washers Port .317"; Stbd. .393"; Port .495"; Stbd. .40

Crank shaft material O.H. Steel Identification Mark 8590 22.5.43 T.C. Thrust shaft material O.H. Steel Identification Mark M 6906-22.  
 L.R. 1563-1496-8426-1532-8226  
 Intermediate shafts, material Steel Identification Marks 24-6-43 H.G.S. Tube shaft, material --- Identification Mark ---  
 L.R. 1537

Screw shaft, material Steel Identification Mark 24-6-43 H.G.S. Steam Pipes, material Steel Test pressure 600 lbs. Date of Test 22/11/44  
 Is an installation fitted for burning oil fuel --- 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 "ROCKWOOD PARK"

General Remarks (State quality of workmanship, opinions as to class, &c.)

**This ENGINE together with Thrust Shaft, Thrust Block and Condenser have been constructed under Special Survey in accordance with the Rules and Approved Plans, and the workmanship is, in my opinion, good.**

**The Forgings and Castings have been tested, finally examined by the Undersigned and found satisfactory. This ENGINE has been shipped to St. John Dry Dock and Shipbuilding Company Limited, Saint John, New Brunswick, 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 the Vessel, subject to satisfactory installation and sea trials.**

This ENGINE has been installed in this vessel along with the intermediate shafting, tail end shaft, stern tube and auxiliary machinery, in accordance with the rules and approved plans, and the materials and workmanship are of good quality.

Main engine cylinder and valve chest covers were removed for internal examination of cylinders and valve chests after official dock and sea trials; both examinations were satisfactory, the cylinder walls and valve faces being found in good condition.

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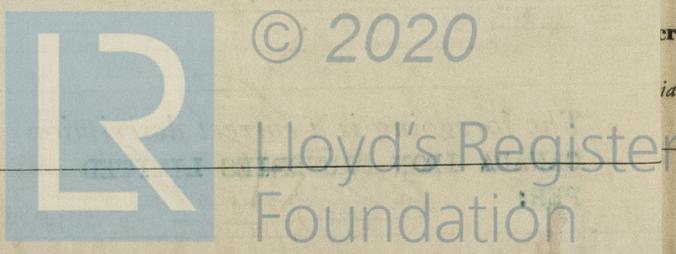
Montreal:

The amount of Entry Fee ...	\$ 20:00	: } When applied for,	Aug 4 1943
Special ...	\$ 200:00		
Donkey Boiler Fee ...	£	: } When received,	19
Travelling Expenses (if any) \$	12:50		

Saint John:-  
 Installation of Machinery \$250.00; Expenses \$15.35  
 Committee's Minute FRI. 21 APR 1944

Assigned + L.M.C. 1.44  
 J.D. C.L.

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



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