

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 2 OCT 1944

OCT 1944

Date of writing Report **May 4, 1944** When handed in at Local Office **April 26, 1944** Port of **Montreal, Que.**
 No. in Survey held at **Three Rivers, Que.** Date, First Survey **Oct. 26, 1943** Last Survey **April 24, 1944**
 Reg. Book **Constant attendance** on the steel single screw steamer "**BLOOMFIELD PARK**"
 (Number of Visits) **22 visits** Tons Gross **2884** Net **---**

Built at **Saint John, N.B.** By whom built **St. John Drydock & Shipbuilding Co. Ltd.** Yard No. **18** When built **1944**
 Engines made at **Three Rivers, Que.** By whom made **Canada Iron Foundries Ltd.** Engine No. **2022** When made **1944**
 Boilers made at **Lachine, Que.** By whom made **Dominion Bridge Co. Ltd.** Boiler No. **B1340 P3** When made **1944**
 Registered Horse Power **---** Owners **Canadian Government** Port belonging to **---**
 Nom. Horse Power as per Rule **268.81** 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 3 Cylinder** 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"** Crank pin dia. **11.25"** Crank webs Mid. length breadth **16.25"** Thickness parallel to axis **6.875"**
 as fitted **11.25"** Mid. length thickness **6.875"** Thickness around eye-hole **4.75"**
 Intermediate Shafts, diameter as per Rule **10.47"** Thrust shaft, diameter at collars as per Rule **10.99"**
 as fitted **10.75"** as fitted **11.25"**
 Main Shafts, diameter as per Rule **---** Screw Shaft, diameter as per Rule **11.78"** Is the shaft fitted with a continuous liner **Yes**
 as fitted **---** as fitted **12.25"** as fitted **---**
 Bronze Liners, thickness in way of bushes as per Rule **.657"** Thickness between bushes as per Rule **.493"** Is the after end of the liner made watertight in the
 as fitted **.6875"** as fitted **.53125"**
 Propeller boss **Yes**
 Propeller, dia. **15.75"** Pitch **14.0"** No. of Blades **4** Material **Bronze** whether Moveable **No** Total Developed Surface **---** sq. ft.
 Bilge Pumps worked from the Main Engines, No. **2** Diameter **3"** Stroke **26"** Can one be overhauled while the other is at work **Yes**
 Main Bilge Line (No. and size **2 - 8"-6"-15"** Pumps connected to the Main Bilge Line (No. and size **1 - 10"-12"-10"** How driven **Steam**
 Lubricating Oil Pumps, including Spare Pump, No. and size **---**
 Oil Cooler **---** Suctions, connected to both Main Bilge Pumps and Auxiliary
 In Engine and Boiler Room **E.R.S. 1-4"; P. Aft. 1-3"; P. For'd. 1-3 1/2"; B.R.P. 1-3"; S. 1-3"**
 In Holds, &c. **No. 1 1-3"P.; 1-3"S.; No. 2 1-3"P.; 1-3"S.**
 In Water Circulating Pump Direct Bilge Suctions, No. and size **1-6"** Independent Power Pump Direct Suctions to the Engine Room Bilges,
 and size **1-4"; 1-3"; 1-3 1/2"** Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes **Yes**
 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**
 all Sea Connections fitted direct on the skin of the ship **No** Suctions Cofferdam fitted with Valves or Cocks **Yes** valves and cocks
 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.**
 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**
 at Pipes pass through the bunkers **No. 4 S.D.B. Tank Air Pipe** How are they protected **Sheet Steel Casings**
 at pipes pass through the deep tanks **---** Have they been tested as per Rule **---**
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **Yes**
 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.**
 and Description of Boilers **2 - Multitubular Scotch Boilers** Working Pressure **200 lbs./ Square Inch**
 A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**
 A DONKEY BOILER FITTED? **No** If so, is a report now forwarded? **---**
 the donkey boiler be used for domestic purposes only **---**
 Are approved plans forwarded herewith for Shafting **Approved London Main Boilers Approved New York Auxiliary Boilers** Donkey Boilers **---**
 Superheaters **Approved London** General Pumping Arrangements **New York** Oil fuel Burning Piping Arrangements **---**

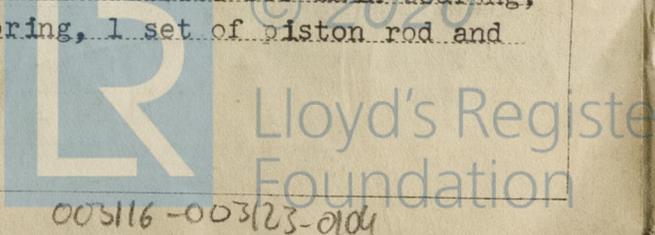
SPARE GEAR.

Is the spare gear required by the Rules been supplied **Yes**
 the principal additional spare gear supplied **Main Condenser: 25 tubes, 50 ferrules, 100 pieces of condenser tube pack
 one tap for tube plate, 1 die for condenser ferrules, 1 guide pin for packing, 1 packing extrac-
 one ferrule driver, one tube driver. Main Engines: 3 sets of wearing segments of King tandem
 king for H.P., I.P., and L.P. valve spindles. Boilers: 10 plain boiler tubes, 2 stay tubes, 2 of
 h. dead plates, bearer plates and bridge plates, 2 safety valve springs, 1 pressure gauge, 1 tube
 ander. Forced Draught: 3 baffle plates, 1 furnace door complete, 2 ash pit doors complete, 4
 valves complete, 14 retarders. Superheaters: 2 header drain valves, 96 flexible unit gaskets,
 set of tools. Telemotor: 1 box containing assorted valve springs, packing rings, copper joints;
 ets. of S.E.A. ring packing, 1 set of tools. Steering Engine: 1 set of brasses for main bearing;
 bottom end and cross head, 2 piston rings; 1 buffer complete with spring, 1 set of piston rod and
 live spindle packing.**

The foregoing is a correct description

Canada Iron Foundries Limited

Manufacturer.



005116-003123-0104

Constant attendance - from Oct. 26, 1943 to April 24, 1944

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits Saint John = 22

Dates of Examination of principal parts - Cylinders 17.2.44 28.3.44 Slides 10.2.44 1.3.44 Covers 24.2.44 3.3.44

Pistons 4.1.44 16.2.44 22.4.44 Piston Rods 29.1.44 25.2.44 1.4.44 Connecting rods 27.1.44 8.3.44 6.4.44

Crank shaft 18.3.44 5.4.44 Thrust shaft 12.7.43 5.4.44 Intermediate shafts 2-9-43 24-5-44 24-5-

Tube shaft ----- Screw shaft 2-9-43; 24/5/44 Propeller Bronze-12-5-44 Cast Iron 15-5-

Stern tube 26-1-44: 27/4/44 Engine and boiler seatings 9/6/44 Engines holding down bolts 12/7/44

Completion of fitting sea connections Suctions 2-5-44 Discharges 5-5-44

Completion of pumping arrangements 20/8/44 Boilers fixed 2/8/44 Engines tried under steam 23/8/44

Main boiler safety valves adjusted 21/8/44 Thickness of adjusting washers P.V. 315 S.V. 482 P.V. 320 S.V. 320

Crank shaft material Pins & Journals Identification Mark Crank Webs Cast Steel Lloyd's 7646 Thrust shaft material O.H. Steel Identification Mark T.C. 5.4.44

Intermediate shafts, material O.H. Steel Lloyd's 8201, 280, 5255, 8213, 9548 Identification Marks H.S. 2-9-43 Tube shaft, material Identification Mark

Screw shaft, material O.H. Steel Identification Mark H.S. 2-9-43 Pipes, material W. Steel Test pressure 600 lbs. Date of Test McG 12

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 "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 and finally examined by the undersigned and found satisfactory.

This ENGINE has been shipped to St. John Dry Dock & Shipbuilding Company Limited, St. John, N.B. 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, stern tube bush, tail shaft, propeller, auxiliary machinery and sea valves and cocks, in accordance with the Rules and approved plans. The materials and workmanship are of good quality.

The main engine cylinders and valve chests were examined internally on completion of official and Sea Trials and on both examinations, were found satisfactory. The cylinder walls and valve faces and working parts generally were found in good condition.

The amount of Entry Fee ... \$ 20:00 : When applied for,

Special ... \$ 200:00 : 11 May 44

Donkey Boiler Fee ... \$:00 : When received,

Travelling Expenses (if any) \$ 17:00 : 19

St. John a/c: - Installation of mech. = \$ 250.00
Expenses = \$ 26.00

Committee's Minute TUES. 10 OCT 1944

Thomas Clark & P.B. Mc
Engineer Surveyor to Lloyd's Register of Shipping
applied for at Saint John
Sept. 13, 1944



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

Assigned +LMC 9 44
FD. CL