

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

28 DEC 1945

Received at London Office

Date of writing Report Aug. 15th, 1945 When handed in at Local Office July 14th, 1945 Port of Montreal, Que.
No. in Survey held at Three Rivers, Que. Date, First Survey Nov. 28th, 1944 Last Survey July 7th, 1945
Reg. Book Constant attendance Nov. 18, 1945
on the Single screw steamer "SHAKESPEARE PARK" Tons Gross 2894 Net 1649
Built at Saint John, N.B. By whom built St. John Drydock & Shipbuilding Co. Ltd. Yard No. 21 When built 1945
Engines made at Three Rivers, Que. By whom made Canada Iron Foundries Ltd. Engine No. 2043 When made 1945
Boilers made at Lachine, P.Q. By whom made Dominion Bridge Co. Ltd. Boiler No. B.1509 S.6 When made 1945
Registered Horse Power Owners Canadian Government Port belonging to Montreal
Nom. Horse Power as per Rule 268.81 269 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Made for which Vessel is intended Ocean Going

ENGINES, &c.—Description of Engines Triple Expansion 3 Cylinder Revs. per minute 72
No. of Cylinders 20" 31" 55" Length of Stroke 39" 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 11.78" Is the shaft fitted with a continuous liner Yes
as fitted 12.25"
Bronze Liners, thickness in way of bushes as per Rule .657" Thickness between bushes as per Rule .493"
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 75 sq. ft.
Suction Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 26" Can one be overhauled while the other is at work Yes
Large 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 Pumps (No. and size 2. 3"x26"; 2. 8"x6"x15" Pumps connected to the Main Engine Main Bilge Line How driven Main Engine - Steam
Main Bilge Line How driven Main Engine - Steam
Ballast Pumps, No. and size 1. 10" x12" x10" Lubricating Oil Pumps, including Spare Pump, No. and size --
Two independent means arranged for circulating water through the Oil Cooler -- Suctions, connected to both Main Bilge Pumps and Auxiliary
Eng. R.S. 1.4"; P. Aft. 1.3"; P. Fwd. 1.3.5"; Blr. R. P. 1.3"; Blr. R. S. 1.3"
In Holds, &c. No. 1. 1.3"; S. 1.3"; No. 2 P. 1.3"; S. 1.3"; No. 3 Aft.
1-2.5"; S. 1-2.5"; For'd. P. 1-2.5"; S. 1-2.5"; Tunnel Well 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,
and size S. 1-4"; P. A. 1-3"; P. F. 1-3.5"
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
Inlet & outlet valves: Blowdown
Are all Sea Connections fitted direct on the skin of the ship Suctions on coffer dam Are they fitted with Valves or Cocks Bilge & ballast above; Condenser below.
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
But Pipes pass through the bunkers tank air pipe How are they protected Sheet steel casing
But pipes pass through the deep tanks No deep tank Have they been tested as per Rule Yes
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
apartment to another Yes Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door Blank 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
A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
A DONKEY BOILER FITTED? -- If so, is a report now forwarded? --
Can the donkey boiler be used for domestic purposes only Approved Approved
Plans. Are approved plans forwarded herewith for Shafting London Main Boilers 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
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 extractor,
ferrule driver, one tube driver. Main Engines: 3 sets of wearing segments of King tandem packing
H.P., I.P., and L.P. valve spindles. Boilers: 10 plain boiler tubes, 2 stay tubes, 2 of each
d plates, bearer plates and bridge plates, 2 safety valve springs, 1 pressure gauge, 1 tube expander,
ced draught: 3 baffle plates, 1 furnace door complete, 2 ash pit doors complete, 4 air valves com-
te, 14 retarders, Superheaters: 2 header drain valves, 96 flexible unit gaskets, 1 set of tools.
emotors: 1 box containing assorted valve springs, packing rings, copper joints; 3 sets of S.E.A.
g packing, 1 set of tools. Steering Engine: 1 set of brasses for main bearing, bottom end and
sshead, 2 piston rings; 1 buffer complete with spring, 1 set of piston rod and valve spindle
king.

The foregoing is a correct description
Canada Iron Foundries Limited

Manufacturer.

Constant attendance - from November 28th, 1944 to July 7th, 1945.

Dates of Survey while building
During progress of work in shops -
During erection on board vessel -
Total No. of visits

Dates of Examination of principal parts - Cylinders 17.4.45 24.4.45 Slides 13.3.45 23.4.45 Covers 9.3.45 21.4.45
Pistons 11.4.45 20.5.45 7.7.45 Piston Rods 20.4.45 28.5.45 7.7.45 Connecting rods 6.4.45 3.5.45 7.7.45
Crank shaft 26.4.45 30.5.45 28.6.45 Thrust shaft 21.4.45 28.6.45 Intermediate shafts 17.11.44
Tube shaft -- Screw shaft 17.11.44 Propeller 29.8.45
Stern tube 12.7.45 Engine and boiler seatings 1.9.45 Engines holding down bolts 11.10.45

Completion of fitting sea connections 1.9.45
Completion of pumping arrangements 3.10.45 Boilers fixed 10.10.45 Engines tried under steam 29.10.45
Main boiler safety valves adjusted 30.10.45 Thickness of adjusting washers P. .538" S. .563"; P. .540" S. 480"
Crank Webs Cast Steel Lloyd's 3337
Crank shaft material Pins & Journals Identification Mark T.C. 28.6.45 Thrust shaft material O.H. Steel Identification Mark Lloyd's 50
Intermediate shafts, material O.H. Steel Identification Mark Lloyd's 9489, 9494 Tube shaft, material -- Identification Mark --
Screw shaft, material O.H. Steel Identification Mark Lloyd's 8928 17.11.44 T.M. Steam Pipes, material less Steel Test pressure 1000# 2500# Date of Test 2/3/45
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 -- Not required
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 Co. Limited, Saint 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 and bush, tail shaft, propeller, auxiliary machinery and sea valves and cocks, in accordance with the Ruled 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 Dock 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, Sept. 16, 1945
Special ... \$ 200.00 :
Donkey Boiler Fee ... \$: 50 : When received,
Travelling Expenses (if any) \$ 22.00 :
St. John etc :- Installation of machy & Blos - \$ 250.00
Committee's Minute ... 38.00
Assigned + LMC 11.45
F.D. C.L. Sph

Engine Surveyor to Lloyd's Register of Shipping.