

pt. 4. REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

52 AUG 1945

Date of writing Report March 15, 1945 When handed in at Local Office Jan. 24, 1945 Port of Montreal, Que.
No. in Survey held at Montreal, Que. Date, First Survey Dec. 22, 1944 Last Survey Jan. 18, 1945
Reg. Book Constant attendance (Number of Visits.....)
on the Steel Single Screw Steamer "HIGHLAND PARK" Tons { Gross 7149.58
Net 4214.21
Built at North Vancouver, B.C. By whom built North Van Ship Repairs Ltd. Yard No. 152 When built 1945
Engines made at LACHINE, Que. By whom made CANADIAN ALLIS-CHALMERS LIMITED Engine No. 393 When made 1944-45
Boilers made at By whom made Boiler No. When made
Registered Horse Power Owners Port belonging to
Nom. Horse Power as per Rule 628 505 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 76
Dia. of Cylinders 24½" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3 9" & 9½"
Crank shaft, dia. of journals as per Rule 14.21" Crank pin dia. 14½" Crank webs Mid. length breadth Thickness parallel to axis on L.P.
as fitted 14.25" Mid. length thickness Thickness around eye-hole 7 1/8" & 7 5/8"
Intermediate Shafts, diameter as per Rule 13.53" Thrust shaft, diameter at collars as per Rule 14.21"
as fitted 13.5" as fitted 14.25"
Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 15.07" Is the screw shaft fitted with a continuous liner { Yes
as fitted as fitted 15.25"
Bronze Liners, thickness in way of bushes as per Rule .76" Thickness between bushes as per Rule .57" Is the after end of the liner made watertight in the
propeller boss Yes as fitted .78125" as fitted .68125" 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 Yes
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 If so, state type 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 4½" 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 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 PR
No. and Description of Boilers Working Pressure 250 lbs./sq.in. (Spht. 230 lbs./sq.in.)
IS A REPORT ON MAIN BOILERS NOW FORWARDED?
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 Main Boilers 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
Is the principal additional spare gear supplied

The foregoing is a correct description
Canadian Allis-Chalmers Limited

By: L.P. Brady Manufacturer.

003513-003524-0268

© 2020

Lloyd's Register
Foundation

Dates
of Survey
while
building

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

From December 22nd, 1944 to January 18th, 1945 (Constant attendance).

Dates of Examination of principal parts—Cylinders 5.1.45 2.1.45 28.12.44 Slides 5.1.45 2.1.45 28.12.44 Covers 5.1.45 2.1.45 28.12.44
Pistons 5.1.45 2.1.45 28.12.44 Piston Rods 17.1.45 Connecting rods 4.1.45
Crank shaft 18.1.45 Thrust shaft 17.1.45 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 7036

HGLP.18.1.45

Thrust shaft material

O.H. Steel

Identification Mark

Lloyd's 9

HGLP.17.1

Intermediate shafts, material O.H. Steel Identification Marks

Tube shaft, material

Identification Mark

Screw shaft, material O.H. Steel Identification Mark

Steam Pipes, material

Test pressure

Date of Test

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

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

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

This ENGINE has been constructed under Special Survey and in conformity with the Society's Rules and Regulations and Secretary's letters.

The scantlings are in accordance with, or equivalent to, those shown on the Approved Plans.

The materials and workmanship are good and the H.P., M.P. and L.P. Cylinders were hydrostatically tested to 330, 110 and 30 lbs. pressure per square inch respectively and found sound and tight at those pressures.

This 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 trials.

The amount of Entry Fee ... \$ 30:00
Special ... \$ 267:00
Donkey Boiler Fee ... \$:50
Travelling Expenses (if any) \$ 18:00

When applied for,
25th April 1945
When received,
12.6.45
VCR.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Su F.E. machy. rpt.



© 2020

Lloyd's Register
Foundation