

REPORT ON MACHINERY.

No. 1625

REC'D NEW YORK Nov. 27, 1918
When handed in at Local Office

Received at London Office

Port of Montreal

MON. 16 DEC. 1918

Where and when tested at Superintendent.

in Survey held at Lachine

on the Engine N° R 17. J. M. B. Wood & S. L. "War Quebec"

ster J. Cormac

Built at Lachine P. 2.

By whom built Lachine Ship & Rep. Co. Ltd.

By whom made Dominion Bridge Co. Ltd.

By whom made Engine & Machine Co. of Canada

When made 1918.

When made 1918.

Port belonging to Lachine.

Is Refrigerating Machinery fitted for cargo purposes No.

Is Electric Light fitted Yes.

GINES, &c.—Description of Engines Inverted Triple Expansion No. of Cylinders 3.

No. of Cranks 3.

Length of Stroke 40" Revs. per minute 70.

Dia. of Screw shaft 11 7/8"

Material of screw shaft Steel

the screw shaft fitted with a continuous liner the whole length of the stern tube No. 3 liners

Is the after end of the liner made water tight

the propeller boss Yes. If the liner is in more than one length are the joints burned soldered

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

If two

ers are fitted, is the shaft lapped or protected between the liners

Length of stern bush 4'-1"

a. of Tunnel shaft as per rule 10-30"

Dia. of Crank shaft journals as per rule 10-9"

Dia. of Crank pin 11 1/8"

Size of Crank webs 3-5 x 7"

Dia. of thrust shaft under

lars 11 1/2"

Dia. of screw 14-6"

Pitch of Screw 15-3"

No. of Blades 4.

State whether moveable No.

Total surface 66-4 Sqft.

of Feed pumps 2.

Diameter of ditto 3 1/2"

Stroke 20"

Can one be overhauled while the other is at work Yes.

of Bilge pumps 2.

Diameter of ditto 3 1/2"

Stroke 20"

Can one be overhauled while the other is at work Yes.

of Donkey Engines 3

Sizes of Pumps Ballast duplex 7 1/2 x 9 x 10"

End feed 10 x 6 x 7"

No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 2-3"

In Holds, &c. Fore Peak 1-2 1/2"

No. 1 Hold 2-3"

Link space 2-4"

of Bilge Injections / sizes 6"

Connected to condenser, or to circulating pump Yes

Is a separate Donkey Suction fitted in Engine room & size Yes 4"

Are all the bilge suction pipes fitted with roses Yes

Are the roses in Engine room always accessible Yes

Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship Yes

Are they Valves or Cocks Both.

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes

Are the Discharge Pipes above or below the deep water line Above

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

How are they protected At side of steel bulkhead & wood casing

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

ates of examination of completion of fitting of Sea Connections 27-6-18

of Stern Tube 13-6-18

Screw shaft and Propeller 27-6-18

the Screw Shaft Tunnel watertight No

Is it fitted with a watertight door with catches worked from engine room.

ILERS, &c.—(Letter for record S.) Manufacturers of Steel

Heating Surface of Boilers 5282 Sqft.

Is Forced Draft fitted Yes.

No. and Description of Boiler Two Horizontal Water Tube.

orking Pressure 185 lbs.

Tested by hydraulic pressure to

Date of test

No. of Certificate

in each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

ch boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

allest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

ickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

ry. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

er centages of strength of longitudinal joint

Working pressure of shell by rules

Size of manhole in shell

ze of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

ength of plain part

Thickness of plates

Description of longitudinal joint

No. of strengthening rings

orking pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

itch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

aterial of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

aterial

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

ickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

itch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

ickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

orking pressure by rules

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

eparately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

les

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

orking pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

W734-0011

VERTICAL DONKEY BOILER— Manufacturers of Steel

No.	Description				
Made at	By whom made	When made	Where fixed		
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate	Fire grate area	Description of
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment	
If fitted with easing gear	If steam from main boilers can enter the donkey boiler	Dia. of donkey boiler	Length		
Material of shell plates	Thickness	Range of tensile strength	Descrip. of riveting long. seams		
Dia. of rivet holes	Whether punched or drilled	Pitch of rivets	Lap of plating	Per centage of strength of joint	Rivets Plates
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.	Dia. of stays	
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates	Description of joint	
Working pressure of furnace by rules	Thickness of furnace crown plates	Radius of do.	Stayed by		
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey		

SPARE GEAR. State the articles supplied:—4 connecting rod top end bolts & nuts. 2 connecting rod bottom end bolts & nuts. 2 main bearing bolts & nuts. 1 set of coupling bolts & nuts. 1 set of feed & bilge pump 3 sets of piston rings. 1 spare propeller. A quantity of assorted bolts & nuts of various sizes. 25 condenser tubes & 50 ferrules & packing. 1 set of air & circulating pump valves.

The foregoing is a correct description,

A. E. Johnson W.E. Manufacturer.

Dates of Survey while building	During progress of work in shops - -	Dec. 12, 1917 Jan. 2, 7, 21, 24, 29 Feb. 1, 4, 10, 16, 20 Mar. 5, 9, 13, 19, 25 Apr. 1, 5, 8, 19, 25 May 4, 15, 21, 29, 31, June 6, 8, 13, 18, 28 & July 1, 1918
	During erection on board vessel - - -	July 10, 30 Aug. 3, 8, 12, 15, 16, 23, 30, Sept. 7, Oct. 4, 11, 22, Nov. 7.
	Total No. of visits	46.

Is the approved plan of main boiler forwarded herewith ☒

" " " donkey " " " ☒

Dates of Examination of principal parts—Cylinders	21-5-18 29-5-18 31-5-18	Slides	21-5-18	Covers	8/6/18.	Pistons	8/6/18	Rods	4/5/18.
Connecting rods	6/6/18.	Crank shaft	4-5-18	Thrust shaft	15-5-18.	Tunnel shafts	15-5-18 21-5-18.	Screw shaft	
Stern tube		Steam pipes tested	30-9-18	Engine and boiler seatings	27-6-18	Engines holding down bolts	23-8-18		
Completion of pumping arrangements	11-11-18	Boilers fixed	8-8-18	Engines tried under steam	22-10-18				
Main boiler safety valves adjusted	4-11-18	Thickness of adjusting washers	Should Bln A 5/8 F 5/8 Port Bln A 5/8 F 5/8						
Material of Crank shaft	Steel	Identification Mark on Do.	W.V.S. A.J.M.	Material of Thrust shaft	Steel	Identification Mark on Do.	F.W.T.		
Material of Tunnel shafts	Steel	Identification Marks on Do.	A.J.M.	Material of Screw shafts	Steel	Identification Marks on Do.	T.M.		
Material of Steam Pipes	Steel	Test pressure	555 lbs. v						

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

These engines have been constructed under special survey and in accordance with the rules. The materials are good and the workmanship satisfactory. They have been installed in the vessel and tried under full working conditions together with the auxiliary machinery and were all found to be working satisfactorily. In my opinion they are eligible to bear the record of L.M.C 11-18 in the Register book of the Society. The joints of the liner to be specially examined at the end of two years.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 11-18. FD.

Subject to annual survey of Water Tube Boilers
Subject to the screw shaft being specially examined
at joints of liners before the end of November 1920

44
18/12/18.

The amount of Entry Fee	\$15.00	When applied for,	8th July 1918
Special Installation Fee	£ 61.00	When received,	27/2/19
Donkey Boiler Fee	£ 61.00		
Travelling Expenses (if any)	£ 3.80		

Committee's Minute

Assigned

J. Robinson & R. J. Alderson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping



TUE 15 APR 1919

Lloyd's Register
Foundation

FRI. APR. 16 1920