

Rpt. 4.

REPORT ON MACHINERY.

No. 22

REC'D NEW YORK

Received at London Office

THU 31 1919

Date of writing Report

19

When handed in at Local Office

19

Port of

Halifax N.S.

in Survey held at

Amherst N.S.

Date, First Survey

Dec. 19-1917

Last Survey

Feb. 27

1919

Reg. Book.

on the "Wood. S.S. 'War Gaspo'"

(Number of Visits)

Master

A. S. Muck

Built at

Quebec

By whom built

Quinlan & Robakow

Tons

Gross 2268

Net 1367

When built

1918

Engines made at

Amherst N.S.

By whom made

Roth Engineering Works Ltd

when made

6-18

Boilers made at

Montreal

By whom made

Canadian Sickers Ltd.

when made

1918

Registered Horse Power

146.8

Owners

Imperial Munitions Board

Port belonging to

Quebec

Nom. Horse Power as per Section 28

322

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

20-33-54

Length of Stroke

40

Revs. per minute

70

Dia. of Screw shaft

as per rule 11.8

Material of

Steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Yes

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

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

Length of stern bush

48"

Dia. of Tunnel shaft

as per rule 10.311

Dia. of Crank shaft journals

as per rule 10.826

Dia. of Crank pin

11.125

Size of Crank webs

41.5x7

Dia. of thrust shaft under

Diameters

11.5

Dia. of screw

14.6

Pitch of Screw

15.3

No. of Blades

4

State whether moveable

No

No. of Feed pumps

2

Diameter of ditto

3.5

Stroke

20

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

3.5

Stroke

20

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

3

Sizes of Pumps

18x6x8 1/2

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

Engine Room

2-3

Tunnel 1-3

In Holds, &c. No. 1. 2-3 1/2-4 No. 2. 1-3 1/2-2 1/2 Bunkers

No. of Bilge Injections

1

sizes

6"

Connected to

condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

1-4"

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

Are all pipes carried through the bunkers

All suction to forward of vessel

How are they protected

Alongside shell bulkhead & wood

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

Is the Screw Shaft Tunnel watertight

No

Is it fitted with a watertight door

Yes

worked from

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

2 Water tube boilers

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

Each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

C. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Percentages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

Thickness of plates

crown

Description of longitudinal joint

bottom

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Shipping meter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

Thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

Steam dome: description of joint to shell

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Pitch of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

W702-0027

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Two main bearing bolts
One set of coupling bolts
One set of piston springs
Iron of various sizes
One set circulating pump valves
Twenty five condenser tubes

Two connecting rod top end bolts and nuts
Two connecting rod bottom end bolts and nuts
One set of feed and bidge pump valves
Quantity of assorted bolts and nuts
One propeller
One set air pump valves
Fifty condenser ferrules.

The foregoing is a correct description,

ROBB ENGINEERING WORKS, LIMITED

Robb Manager

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } Dec 19th 1917. (1918) Jan 11. March 13. April 12. May 13. June 4-18-11. July 2-4
{ During erection on board vessel - - } July 27. Aug. 5. 8. 12. 16. 23. Sept 13. Oct. 11. 24. Nov. 7. 11. Dec. 1.
Total No. of visits. Is the approved plan of main boiler forwarded herewith No

Dates of Examination of principal parts—Cylinders 12-4-18 Slides 13-5-18 Covers 13-5-18 Pistons 13-5-18 Rods 13-5-18

Connecting rods 13-5-18 Crank shaft 13-5-18 Thrust shaft 18-6-18 Tunnel shafts 18-6-18 Screw shaft 2-7-18 Propeller

Stern tube Steam pipes tested 30-8-18 Engine and boiler seatings 27-7-18 Engines holding down bolts 30-8-18

Completion of pumping arrangements 1-12-18 Boilers fixed 12-8-18 Engines tried under steam 1-12-18

Completion of fitting sea connections 27-7-18 Stern tube 27-7-18 Screw shaft and propeller 27-7-18

Main boiler safety valves adjusted 24-2-19. 190lb. Thickness of adjusting washers P. Ford 15/32 P. Aft 3/8 S. Ford 1/4 S. Aft 1/4

Material of Crank shaft O.H. Steel Identification Mark on Do. 4-7-18 Material of Thrust shaft O.H. Steel Identification Mark on Do. 18-6-18

Material of Tunnel shafts O.H. Steel Identification Marks on Do. 18-6-18 Material of Screw shafts O.H. Steel Identification Marks on Do. 2-7-18

Material of Steam Pipes Steel Test pressure 540lbs

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 Section 49 of the Rules been complied with WAR

Is this machinery duplicate of a previous case Yes If so, state name of vessel Seneca One

General Remarks (State quality of workmanship, opinions as to class, &c. These engines have been constructed

under special survey in accordance with the Rules. The materials are good and workmanship satisfactory. These engines are being shipped to Quebec P.Q. where it is intended to fit the together with the boilers, on board one of the wood vessels to the order of the Imperial Munitions Board, and after being assembled satisfactorily, the vessel will be eligible in my opinion, to have the record of LMC with date, and recommend the screw shaft be examined annually.

These engines have been installed on board together with the boiler & auxiliary machinery. The whole has been tried out under full working conditions with satisfactory results. In my opinion they are eligible to have the record of LMC with date when the safety valves have been adjusted.

The Rules' Safety Valves have been adjusted under steam to the safe working pressure at Halifax N.S.

R Lee Ames

It is submitted that this vessel is eligible for THE RECORD. + LMC. 2-19. F.D.

SUBJECT TO ANNUAL SURVEY OF WATER TUBE BOILERS, AND TO THE SCREW SHAFT BEING SPECIALLY EXAMINED AT JOINT OF LINER BEFORE THE END OF FEBRUARY 1921

The amount of Entry Fee ... £ : : When applied for, Special ... £ \$ 60.00 July 22nd 1918
Donkey Boiler Fee ... £ 61.00 14/5/19
Travelling Expenses (if any) £ 40.00 24/5/19

Y. Moon. R. Alford 10/4/19
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

FRI. APR. 11. 1919
+ R. MC 2.19 J. D.
Subject

MACHINERY CERTIFICATE

WRITTEN 11.4.19

+ 16.5.19

TUE. MAR. 2. 19

FRI. 22. AUG. 1919

TUE. NOV. 25. 1919

TUE. 16 DEC. 1919

Lloyd's Register Foundation