

REPORT ON MACHINERY.

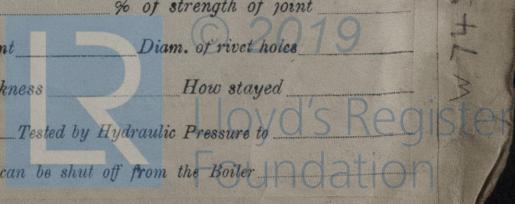
No. 1153
MON. 23 JUN. 1919

Received at London Office

Port of Halifax N.S.
 Date, First Survey Oct 26th 1917 Last Survey April 25th 1919
 (Number of Visits 27)
 Survey held at Amherst N.S.
 on the Hood St. War Halifax
 Master D. J. Bowen Built at Liverpool N.S. By whom built Southern Salvage Co Ltd
 Engines made at Amherst N.S. By whom made Robt Engine Works Ltd when made 1918
 Millers made at Montreal T.Q. By whom made Canadian Vickers Ltd when made 1918
 Registered Horse Power 328 Owners Imperial Munitions Board Port belonging to
 Net Horse Power as per Section 28 328 322 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Yes

GINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3
 No. of Cylinders 20-33-54 Length of Stroke 40 Revs. per minute _____ Dia. of Screw shaft 11.8 Material of screw shaft 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
 Is 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 10.311 Dia. of Crank shaft journals 10.826 Dia. of Crank pin 11.125 Size of Crank webs 41.5 x 7 Dia. of thrust shaft under
 bars 11.5 Dia. of screw 14.5 Pitch of Screw 15.25 No. of Blades 4 State whether moveable No Total surface 64.5
 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 4 Sizes of Pumps weirs and 6.5 x 18, 7.5 x 9, 10, 10.5 x 7, 10.5 x 7 No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 2 x 3", tunnel 1 x 3" In Holds, &c. forepeak 1 x 2 1/2", hold 2 x 3", tank space 2 x 4"
No 2 hold 1 x 3", 2 x 2 1/2", cross bunker 2 x 2 1/2"
 No. of Bilge Injections 1 sizes 6" Connected to ~~circulating~~ to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 1 x 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 Yes
 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 Below
 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
 That pipes are carried through the bunkers Inward sections How are they protected Red at sides of box keelson & wood cases
 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 _____

WELTERS, &c.—(Letter for record _____) Manufacturers of Steel
 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
 No. of 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 _____ Working pressure of shell by rules _____ Size of manhole in shell
 Size of compensating ring _____ No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter
 Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ 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
 Diameter 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 _____
 Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____



W745-0249

IS A DONKEY BOILER FITTED? ✓

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

Two main bearing bolts
One set coupling bolts
One set 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 feed + bilge pump valves
Quantity of assorted bolts + nuts
One propeller
One set air pump valves
Fifty condenser ferrules

The foregoing is a correct description.

ROBB ENGINEERING WORKS, LIMITED

Manufacturer.

Per A. G. Robb

Dates of Survey while building: During progress of work in shops -- Oct 26, Nov 28, Dec 19, 1917. Jan 11-29, March 12-13, April 12-13, May 13-14, 1918
During erection on board vessel --- Sept 13-14 Oct 9-10, Nov 27-28, 1918. Jan 23, March 13-14-18-19, April 3-4-17-19-25
Total No. of visits 27
Is the approved plan of main boiler forwarded herewith ✓
" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 12-4-18 Slides 12-4-18 Covers 12-4-18 Pistons 13-4-18 Rods 13-4-18
Connecting rods 13-5-18 Crank shaft 13-5-18 Thrust shaft 13-4-18 Tunnel shafts 21-3-18 Screw shaft 13-4-18 Propeller 14-5-18
Stern tube 13-5-18 Steam pipes tested 28-11-18 Engine and boiler seatings 14-9-18 Engines holding down bolts 27-11-18
Completion of pumping arrangements 13-3-19 Boilers fixed 13-3-19 Engines tried under steam 14-3-19
Completion of fitting sea connections 20-8-18 Stern tube 20-8-18 Screw shaft and propeller 21-8-18
Main boiler safety valves adjusted 13-3-19 Thickness of adjusting washers Star boiler P 9/32 5 1/4, Port boiler P 1/16 5 3/8
Material of Crank shaft Steel Cast-steel webs Identification Mark on Do. 239 13-5-18 Material of Thrust shaft Steel Identification Mark on Do. 13-4-18
Material of Tunnel shafts Steel Identification Marks on Do. 327 13-4-18, 21-3-18 Material of Screw shafts Steel Identification Marks on Do. 104 13-4-18
Material of Steam Pipes Steel Test pressure 600 lbs

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 ✓

Is this machinery duplicate of a previous case Yes If so, state name of vessel Wax Ferry.

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 Liverpool N.S., where it is intended to fit them, together with the boilers, on board the Imperial Maritime Board Wood steamer "Wax Malifox", and, after being assembled satisfactorily, the vessel will be eligible, in my opinion, to have the record of L.M.C. with date, and recommend the screw shaft be examined annually.

The engines and auxiliary machinery have been satisfactorily fitted on board, and tried under steam. In my opinion they are eligible to receive the record L.M.C. 4-19

Sister vessel "War Arrow"

It is submitted that this vessel is eligible for THE RECORD + LMC 4.19. F.D. Subject to the screw shaft being specially examined at point of liner before the end of 4.21. & the Water tube boilers being surveyed annually

The amount of Entry Fee ... £ \$ 15.00 *
Special Liverpool ... £ 60.00 *
Donkey Boiler Fee ... £ 60.00 *
Travelling Expenses (if any) £ 40.00 *
" " Liverpool * 78.00

A. Moor. 26/6/19
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Assigned

FRI. AUG. 15, 1919

© 2019 Lloyd's Register Foundation

The Shippers are requested not to write on or below the space for Committee's Minute.

MADE IN GREAT BRITAIN
Copies 7.10.19

Home 4.19 Subject