

REPORT ON MACHINERY

No. 28436
SAT. APR. 24. 1915

Received at London Office

Date of writing Report 14th Ap. in 15th Where handed in at Local Office 23.4.15 Port of Hull
 No. in Survey held at Hull Date, First Survey 10-8-14 Last Survey 16.4.1915
 Reg. Book 98 hull on the Steel SSK "BOB WHITE" (Number of Visits 57)

Master Boole Built at Boole By whom built Boole S. B. & Rigg Co Tons Gross 191
Net 72
 Engines made at Hull By whom made Barlis Co Ltd When built 1915
 Boilers made at Hull By whom made Barlis Co Ltd when made

Registered Horse Power 55 Owners Kelsall Bros & Bucking Port belonging to Hull
 Nom. Horse Power as per Section 28 55 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 12.21.33 Length of Stroke 21 Revs. per minute 138 Dia. of Screw shaft 4 3/4 Material of S
 as per rule 5 7/4 as fitted 4 3/4 screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube 2 Is the after end of the liner made water tight
 in the propeller boss yes If the liner is in more than one length are the joints burned ✓ 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 3-0

Dia. of Tunnel shaft 6 1/2 Dia. of Crank shaft journals 6 1/2 Dia. of Crank pin 6 1/2 Size of Crank webs 12x4 1/2 Dia. of thrust shaft under
 collars 6 1/2 Dia. of screw 9-6 Pitch of Screw 7-0 No. of Blades 4 State whether moveable no Total surface 32 1/2

No. of Feed pumps 1 Diameter of ditto 2 1/2 Stroke 10 Can one be overhauled while the other is at work ✓
 No. of Bilge pumps 1 Diameter of ditto 2 1/2 Stroke 10 Can one be overhauled while the other is at work ✓

No. of Donkey Engines one Sizes of Pumps 4 1/2 x 2 1/4 x 4 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room one 2" dia In Holds, &c. one 2" in each compartment

2 1/2" ejector from all bilges

No. of Bilge Injections 1 size 3 1/2 Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size 2 1/2" ejector
 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 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
 What pipes are carried through the bunkers None How are they protected ✓

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

Dates of examination of completion of fitting of Sea Connections 29.1.15 of Stern Tube 29.1.15 Screw shaft and Propeller 29.1.15

Is the Screw Shaft Tunnel watertight ✓ Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Steel Co of Scotland

Total Heating Surface of Boilers 900 Is Forced Draft fitted no No. and Description of Boilers One single ended
 Working Pressure 160 Tested by hydraulic pressure to 320 lbs Date of test 21.1.15 No. of Certificate 3055

Can each boiler be worked separately ✓ Area of fire grate in each boiler 20.5 No. and Description of Safety Valves to
 each boiler 2 Spring Area of each valve 3.14 Pressure to which they are adjusted 165 lbs Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 6" Mean dia. of boiler 26" Length 97 1/4" Material of shell plates S
 Thickness 3/32 Range of tensile strength 28-32 tons Are the shell plates welded or flanged ✓ Descrip. of riveting: cir. seams BR
 long. seams AR. 10/8 Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 5 3/8" Lap of plates or width of butt straps 11 1/2"

Per centages of strength of longitudinal joint 87.5 Working pressure of shell by rules 161 Size of manhole in shell 16x12
 Size of compensating ring 7x21 No. and Description of Furnaces in each boiler 2 plain Material S Outside diameter 34"

Length of plain part 77" Thickness of plates 2 1/8" Description of longitudinal joint welded No. of strengthening rings ✓
 Working pressure of furnace by the rules 176 Combustion chamber plates: Material S Thickness: Sides 5/8" Back 2 1/8" Top 5/8" Bottom 5/8"

Pitch of stays to ditto: Sides 8 1/2 x 9 Back 10 x 9 Top 7 1/2 x 9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 165
 Material of stays S Diameter at smallest part 2.07 Area supported by each stay 90 Working pressure by rules 207 End plates in steam space
 Material S Thickness 7/8" Pitch of stays 15x15 How are stays secured BRNW Working pressure by rules 161 Material of stays S
 Diameter at smallest part 4.2 Area supported by each stay 225 Working pressure by rules 194 Material of Front plates at bottom S

Thickness 7/8" Material of Lower back plate S Thickness 7/8" Greatest pitch of stays 14 x 9 Working pressure of plate by rules 191
 Diameter of tubes 3" Pitch of tubes 4 1/8 x 4 1/8 Material of tube plates S Thickness: Front 7/8" Back 13/16" Mean pitch of stays 9"

Pitch across wide water spaces 14" Working pressures by rules 160 Girders to Chamber tops: Material S Depth and
 thickness of girder at centre 7 1/4 x 1 1/2 Length as per rule 27.28 Distance apart 7 1/2 Number and pitch of stays in each 20 x 9"

Working pressure by rules 226 Superheater or Steam chest; how connected to boiler BR Can the superheater be shut off and the boiler worked
 separately no Diameter 30" Length 30 Thickness of shell plates 7/8" Material S Description of longitudinal joint BR Diam. of rivet
 holes 1 1/16" Pitch of rivets 3 1/4 Working pressure of shell by rules 370 Diameter of flue 30" Material of flue plates S Thickness 5/8"
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness 5/8" How stayed disked

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear ✓

IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

✓

SPARE GEAR.

State the articles supplied :-

Two each top and bottom end connecting rod bolts & nuts, two main bearing bolts & nuts, one set each feed & bilge pump valves, iron of various sizes, a quantity of assorted bolts, nuts etc.

The foregoing is a correct description,

SHIPBUILDING & ENGINEERING CO. LIMITED.

Manufacturer.

Dates of Survey while building { During progress of work in shops - 1914 Aug 10. 17. 19. 26. Sep 3. 9. 10. 19. 25. Oct 6. 8. 13. 20. 27. 28 Nov 2. 6. 7. 12. 13. 16. During erection on board vessel - 14. 19. 24. 26. 30 Dec 1. 7. 9. 11. 12. 16. 17. 22. 28. 29. 30. 31 1915 Jan 4. 12. 13. 19. 20. 21. 29. Feb 1. 18. Mar 22. 25. Apr 6. Total No. of visits 51.

Is the approved plan of main boiler forwarded herewith

yes ✓

Dates of Examination of principal parts - Cylinders 13.1.15. Slides 13.1.15. Covers 13.1.15. Pistons 13.1.15. Rods 18.2.15. Connecting rods 18.2.15. Crank shaft 30.12.15. Thrust shaft 28.12.15. Tunnel shafts ✓ Screw shaft 17.12.15. Propeller 17.12.15. Stern tube 17.12.15. Steam pipes tested 25.3.15. Engine and boiler seatings 29.1.15. Engines holding down bolts 22.3.15. Completion of pumping arrangements 16.4.15. Boilers fixed 22.3.15. Engines tried under steam 25.3.15. Main boiler safety valves adjusted 25.3.15. Thickness of adjusting washers $\frac{1}{32}$ PV $\frac{3}{8}$ SV. Material of Crank shaft S Identification Mark on Do. 1414. Material of Thrust shaft S Identification Mark on Do. 1410. Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts S Identification Marks on Do. 1383. Material of Steam Pipes Copper solid drawn. Test pressure 320 lbs. hyd. press. 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 Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case

yes.

If so, state name of vessel

"White-ear." "Loon"

General Remarks

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

The engines & boiler of this vessel have been constructed under special survey in accordance with the rules. The materials and workmanship are sound & good. The boiler tested by hydraulic pressure and with the engines secured on board & started under steam, they are now in good order and safe working condition, and respectfully submitted as being eligible in my opinion to be classed with the notation of +LMC 4.15 in the Register book.

It is submitted that this vessel is eligible for THE RECORD + LMC 4.15.

The amount of Entry Fee ... £ 1 : : : When applied for, 23/4/15. Special ... £ 8 : 5 : : : When received, 28/4/15. Donkey Boiler Fee ... £ : : : Travelling Expenses (if any) £ : 6 4 : : : 29/4/15.

Committee's Minute

TUE. APR. 27. 1915

Assigned

+ LMC 4.15

RECEIVED



© 2020

Lloyd's Register Foundation