

REPORT ON MACHINERY.

No. 24208
SAT. SEP. 10. 1911

Received at London Office

Date of writing Report 19 When handed in at Local Office 14th Sept 19 Port of Hull
 No. in Survey held at Selby & Hull Date, First Survey Jan 3rd Last Survey 9th Sept 1911
 Reg. Book. 8011 on the Hull S. K. Lord Salisbury (Number of Visits 46)
 Master Built at Selby By whom built Messrs Cochrane & Sons Tons Gross 285 Net 114
 Engines made at Hull By whom made Messrs Charles D. Holmes & Co when made 1911
 Boilers made at Hull By whom made Messrs Charles D. Holmes & Co when made 1911
 Registered Horse Power Owners Yorkshire Steam Fishing Co. Port belonging to Hull
 Nom. Horse Power as per Section 28 75 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 12³/₄ - 22 - 36 Length of Stroke 24 Revs. per minute 113 Dia. of Screw shaft as per rule 7.44 Material of screw shaft as fitted 7.75
 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 in the propeller boss Yes If the liner is in more than one length are the joints burned Yes 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 36
 Dia. of Tunnel shaft as per rule 6.4 Dia. of Crank shaft journals as per rule 7.0 Dia. of Crank pin 7.25 Size of Crank webs 14 - 4¹/₂ Dia. of thrust shaft under collars 7.25 Dia. of screw 9 - 0 Pitch of Screw 11 - 0 No. of Blades 4 State whether moveable No Total surface 29 ft²
 No. of Feed pumps 1 Diameter of ditto 2³/₈ Stroke 14¹/₄ Can one be overhauled while the other is at work —
 No. of Bilge pumps 1 Diameter of ditto 2³/₈ Stroke 14¹/₄ Can one be overhauled while the other is at work —
 No. of Donkey Engines One Sizes of Pumps 6" x 4¹/₂" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room Two 2", one 2¹/₂", one 3" In Holds, &c. One each 2" to fore hold, to slush well, and to cross bunker, and Ejector suction to these parts
 No. of Bilge Injections 1 sizes 3" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes 2¹/₂" 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 None
 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 hold suction How are they protected 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
 Dates of examination of completion of fitting of Sea Connections 22.7.11 of Stern Tube 22.7.11 Screw shaft and Propeller 22.7.11
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel Phoenix Act. Ges. Horndale
 Total Heating Surface of Boilers 1180 ft² Is Forced Draft fitted No No. and Description of Boilers One cyl. Mult. Single Ended
 Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test 30.6.11 No. of Certificate 1821
 Can each boiler be worked separately Area of fire grate in each boiler 39 ft² No. and Description of Safety Valves to each boiler Two Spring Area of each valve 3.94 ft² Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 7" Mean dia. of boilers 12.9" Length 10.6" Material of shell plates S
 Thickness 1⁵/₃₂" Range of tensile strength 28 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams L.D.
 long. seams D.S.S.R. Diameter of rivet holes in long. seams 1³/₁₆" Pitch of rivets 8" Lap of plates or width of butt straps 18"
 Per centages of strength of longitudinal joint rivets 88.8 plate 85 Working pressure of shell by rules 201 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring 4" x 1⁵/₃₂" No. and Description of Furnaces in each boiler Two plain Material S Outside diameter 3'-8⁵/₈"
 Length of plain part top 5' 4¹/₂" bottom Thickness of plates crown 1³/₁₆" Description of longitudinal joint Welded No. of strengthening rings 0
 Working pressure of furnace by the rules 200 lb Combustion chamber plates: Material S Thickness: Sides 2³/₃₂" Back 2³/₃₂" Top 2³/₃₂" Bottom 2³/₃₂"
 Pitch of stays to ditto: Sides 9¹/₂" x 8¹/₂" Back 9¹/₂" x 9¹/₂" Top 8¹/₂" x 10" If stays are fitted with nuts or riveted heads No Working pressure by rules 203 lbs
 Material of stays S Diameter at smallest part 1⁵/₈" Area supported by each stay 87.8 ft² Working pressure by rules 212 lb End plates in steam space: Material S Thickness 1³/₁₆" Pitch of stays 18" x 18" How are stays secured D. 7¹/₂" Working pressure by rules 206 lb Material of stays S
 Diameter at smallest part 6.33" Area supported by each stay 324 ft² Working pressure by rules 203 lb Material of Front plates at bottom S
 Thickness 1⁵/₃₂" Material of Lower back plate S Thickness 3¹/₃₂" Greatest pitch of stays 15" x 9⁵/₈" Working pressure of plate by rules 210 lb
 Diameter of tubes 3¹/₂" Pitch of tubes 4⁷/₈" x 5" Material of tube plates S Thickness: Front 1⁵/₁₆" Back 7⁷/₈" Mean pitch of stays 9⁷/₈"
 Pitch across wide water spaces 14³/₄" Working pressures by rules 293 lb Girders to Chamber tops: Material S Depth and thickness of girder at centre 9¹/₂" x 2" Length as per rule 3'-0" Distance apart 10" Number and pitch of stays in each three 8¹/₂"
 Working pressure by rules Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

Lloyd's Register
 1932-0145

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 Safety _____

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

The foregoing is a correct description,
W. H. Holmes Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1411: Jan 3. 7. 11. 13. Feb 9. 14. 20. Mar 28. 31. Apr 6. 10. 20. May 3. 8. 10. 29. 31. Jun 7. 13. 16. 19. 26

{ During erection on board vessel - - - } 29. 30. July 7. 10. 17. 18. 21. 22. 26. 28. Aug 4. 9. 10. 17. 18. 21. 23. 28. 29. 30. Sep 2. 4. 6. 9

Total No. of visits *46* Is the approved plan of main boiler forwarded herewith *Yes* ✓

Dates of Examination of principal parts—Cylinders *29. 6. 11* Slides *28. 7. 11* Covers *13. 6. 11* Pistons *18. 7. 11* Rods *3. 5. 11*

Connecting rods *10. 4. 11* Crank shaft *10. 7. 11* Thrust shaft *4. 8. 11* Funnel shafts _____ Screw shaft *19. 6. 11* Propeller *16. 6. 11*

Stern tube *16. 6. 11* Steam pipes tested *30. 8. 11* Engine and boiler seatings *18. 8. 11* Engines holding down bolts *2. 9. 11*

Completion of pumping arrangements *9. 9. 11* Boilers fixed *2. 9. 11* Engines tried under steam *9. 9. 11*

Main boiler safety valves adjusted *2. 9. 11* Thickness of adjusting washers *13" 32 12" 31*

Material of Crank shaft *S* Identification Mark on Do. *751 J.B. 1911 MR* Material of Thrust shaft *S* Identification Mark on Do. *751 J.B. 1911 LR*

Material of Funnel shafts _____ Identification Marks on Do. _____ Material of Screw shafts *I* Identification Marks on Do. *751 J.B. 1911 LR 4149.*

Material of Steam Pipes *Solid drawn Copper* ✓ Test pressure *400 lbs per sq inch* ✓

General Remarks (State quality of workmanship, opinions as to class, &c. *The engines and boilers of this vessel have been constructed under special survey in accordance with the Rules. The materials and workmanship are sound and good. The boiler tested by hydraulic pressure, and with the engines placed on board and tested 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 L.M.C. 9. 11 in the Register Book*

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 9. 11.

J.W.D. 18/9/11

The amount of Entry Fee .. £ 1 : : When applied for, 15. 9. 1911

Special .. £ 11 5 : : When received, 30/9/11

Donkey Boiler Fee .. £ : :
 Travelling Expenses (if any) £ : :

James Barclay
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUE SEP 19 1911
 Assigned *J.W.D. 11*



Certificate (if required) to be sent to Hull

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