

REPORT ON MACHINERY.

FRI. 19 JUL 1907

No. 69898

Recd. 19197

Date of writing Report 13/7/07 10 When handed in at Local Office _____ 10 Port of London Received at London Office 16/7/07 Recd. 19197

No. in Survey held at Exchester & Yarmouth Date, First Survey July Last Survey July 6 1907
 Reg. Book. 935 on the Exines No 344 for S.S. - City of Aberdeen (Number of Visits _____)

Master _____ Built at Selby By whom built Bochorage Sons Tons Gross 88
Net 14 When built 1907

Engines made at Exchester By whom made A. G. Humphreys & Co when made 1907-7

Boilers made at Stockton By whom made Riley Bros Ltd when made 1907

Registered Horse Power _____ Owners London & Peterhead S. F. Co. Ltd. Port belonging to Peterhead

Nom. Horse Power as per Section 28 35 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Compound surface condensing No. of Cylinders Two No. of Cranks Two

Dia. of Cylinders 11" & 24" Length of Stroke 16" Revs. per minute 150 Dia. of Screw shaft as per rule 5.42 Material of steel
as fitted 5.2 screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube No Is the after end of the liner made water tight in the propeller boss _____
 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 ✓ two
 liners are fitted, is the shaft lapped or protected between the liners two liners Length of stern bush 1'-10"

Dia. of Tunnel shaft as per rule 4.79 Dia. of Crank shaft journals as per rule 5.02 Dia. of Crank pin 5 1/4" Size of Crank webs 3 1/4 x 7" Dia. of thrust shaft under collars 5 1/4" Dia. of screw 6'-0" Pitch of Screw 8'-0" No. of Blades 4 State whether moveable No Total surface 16 1/2

No. of Feed pumps one Diameter of ditto 2" Stroke 8" Can one be overhauled while the other is at work ✓

No. of Bilge pumps one Diameter of ditto 2" Stroke 8" Can one be overhauled while the other is at work ✓

No. of Donkey Engines one Sizes of Pumps 6" Steam Cyl. 2 1/4" feed pump 3" water pump No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room three 2" & one 2 1/2" In Holds, &c. one 2"

No. of Bilge Injections 1 sizes 2 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes 2"

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 Away

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 30.4.07 of Stern Tube 30.4.07 Screw shaft and Propeller 19.4.07-30.4.07

Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door _____ worked from _____

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel _____

Total Heating Surface of Boilers _____ Is Forced Draft fitted _____ No. and Description of Boilers _____

Working Pressure 140 lbs. 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 _____
 long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____

Per centages 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 top _____ Thickness of plates or crown _____ Description of longitudinal joint _____ No. of strengthening rings _____
bottom _____

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 _____ Diameter 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 _____

Diameter 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 _____

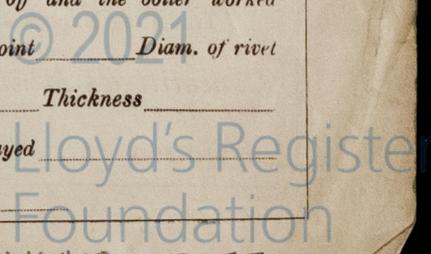
Diameter of tubes _____ Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____

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 _____ 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 _____



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 _____ 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 air, circulating feed and bilge pumps and valves, and a quantity of assorted bolts, nuts, etc.

The foregoing is a correct description,

W. Mumford Lamb Manufacturer.

Dates of Survey while building: During progress of work in shops— 1907 July. Nov 4-20 Apr 10-15-16-17-18-19 May 13-30
 During erection on board vessel— July 17 July 23-6 Hull:— Apr 26-30 May 7-22-25-31 June 6-10-24 July 15-16-17
 Total No. of visits 27.

Is the approved plan of main boiler forwarded herewith No

Dates of Examination of principal parts—Cylinders 6-7-07 Slides 3-7-07 Covers 6-7-07 Pistons 3-7-07 Rods 6-7-07
 Connecting rods 3-7-07 Crank shaft 30-5-07 Thrust shaft 30-5-07 Tunnel shafts 18-4-07 Screw shaft 19-4-07 Propeller 19-4-07
 Stern tube 10-4-07 Steam pipes tested 10-6-07 Engine and boiler seatings 22-5-07 Engines holding down bolts 15-7-07
 Completion of pumping arrangements 15-7-07 Boilers fixed 16-7-07 Engines tried under steam 16-7-07
 Main boiler safety valves adjusted 16-7-07 Thickness of adjusting washers $\frac{5}{16}$ $\frac{5}{16}$

Material of Crank shaft *Steel* Identification Mark on Do. *388 FLS* Material of Thrust shaft *steel* Identification Mark on Do. *388 FLS*
 Material of Tunnel shafts *steel* Identification Marks on Do. *43 FLS* Material of Screw shafts *steel* Identification Marks on Do. *38 FLS*

Material of Steam Pipes *Solid drawn Copper* Test pressure *280 lbs per sq inch.*

General Remarks (State quality of workmanship, opinions as to class, &c. *These engines have been built under special survey in accordance with the rules (the shafting was made by Crabbie of Yarmouth) The engines have been forwarded to Hull for fitting on board *Yorkshire Belle*. In my opinion they will be eligible for the record + L.M.C. with date when completed. The workmanship & material is good.*)

*These engines have been fitted on board, tested under steam found satisfactory, and they are now eligible in my opinion to be classed with the notation of *L.M.C. 7-07* in the Register Book.*

James Barclay.

It is submitted that this vessel is eligible for THE RECORD.

L.M.C. 7-07

J.P.M.
19/7/07

The amount of Entry Fee.. £ 1 : 0 : 0
 Special .. £ 2 : 13/4 :
 Donkey Boiler Fee *Hull.* .. £ 2 : 18/8 :
 Travelling Expenses (if any) £ 1 : 16 : 0

When applied for, 16/7/07
 When received, 23-15-1907

Frank L. Stanger

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

TUES. JUL 23 1907

pd 30-10-07

Committee's Minute

Assigned

+ L.M.C. 7-07

FRI 11 SEP 1908

TUES. 30 MAR 1909



© 2021

Lloyd's Register Foundation

MACHINERY CERTIFICATE WRITTEN.

Certificate (if required) to be sent to

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