

Rpt. 5a.

## REPORT ON BOILERS.

No. 7346  
SAT. MAR. 14. 1914Date of writing Report 10<sup>th</sup> March 14 When handed in at Local Office

19 Port of Belfast

No. in Survey held at Belfast

Date, First Survey 23<sup>rd</sup> Oct 1912 Last Survey 6<sup>th</sup> March 1914

Reg. Book.

(Number of Visits 107) Gross 9406

on the S.S. Carnarvonshire

Tons Net 5955

Master W. L. Ballantyne at Belfast By whom built Workman Clark &amp; Co. Ltd. When built 1914

Engines made at Belfast By whom made when made

Boilers made at By whom made when made

Registered Horse Power 10000 Royal Mail Steam Packet Co. Ltd. belonging to Belfast

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY—Manufacturers of Steel Beardmore &amp; Co. Ltd.

(Letter for record 3) Total Heating Surface of Boilers 5000 sq ft. Is forced draft fitted Yes No. and Description of

Boilers 2 Single End, Cylindrical Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 4-12-13

No. of Certificate 458 Can each boiler be worked separately Yes Area of fire grate in each boiler 59 sq ft. No. and Description of

safety valves to each boiler Two Direct Spring Area of each valve 9.62 sq. Pressure to which they are adjusted 200 lbs.

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork about 18" Mean dia. of boilers 14"-10 1/2" Length 11'-7 1/2"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 28-32 tons the shell plates welded or flanged No

Descrip. of riveting: cir. seams Lap D &amp; S long. seams D. Butt Rivets Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 10 1/2"

Lap of plates or width of butt straps 22 1/2" Per centages of strength of longitudinal joint rivets 83.5 plate 85.7 Working pressure of shell by

rules 226 lbs Size of manhole in shell 16" x 12" Size of compensating ring 18" No. and Description of Furnaces in each

boiler 3 Morrisons Material Steel Outside diameter 47 1/2" Length of plain part top 4" Thickness of plates crown 3 1/2" bottom 3 1/4"

Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 232 lbs Combustion chamber

plates: Material Steel Thickness: Sides 3 1/2" Back 4 1/4" Top 3 1/2" Bottom 4 1/4" Pitch of stays to ditto: Sides 8 1/2" x 7 1/2" Back 8 1/2" x 7 1/2"

Top 8" x 8" If stays are fitted with nuts or riveted heads No Working pressure by rules 211 lbs Material of stays Steel Diameter at

smallest part 1 1/8" Area supported by stay 69 sq Working pressure by rules 269 lbs End plates in steam space: Material Steel Thickness 1 1/2"

Pitch of stays 18 1/2" x 14 1/2" are stays secured by nuts &amp; washers Working pressure by rules 227 lbs Material of stays Steel Diameter at smallest part 2 1/16"

Area supported by stay 235 sq Working pressure by rules 270 lbs Material of Front plates at bottom Steel Thickness 1" Material of

Lower back plate Steel Thickness 1 1/8" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 212 lbs Diameter of tubes 2 1/2"

Pitch of tubes 3 1/4" x 3 5/8" Material of tube plates Steel Thickness: Front 6 3/4" Back 4 1/8" Mean pitch of stays 7 1/2" x 7 1/2" Pitch across wide

water spaces 13 1/2" Working pressures by rules 203 lbs Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 9 1/4" x (3/4" x 2) Length as per rule 34 1/2" Distance apart 8" Number and pitch of Stays in each 3-8"

Working pressure by rules 216 lbs 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

The foregoing is a correct description,  
FOR WORKMAN, CLARK & CO., LIMITED, Manufacturer.Dates of Survey During progress of work in shops - - -  
while building During erection on board vessel - - -

See other Sheet

Is the approved plan of boiler forwarded herewith

Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;c.)

See other Sheet

Survey Fee ... £ : ✓ When applied for, 19  
Traveling Expenses (if any) £ : : When received, 19R. F. D. Beveridge  
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. MAR. 17. 1914

Assigned

© 2020  
Lloyd's Register  
Foundation



## Donkey Pumps

1 Ballast. Wrecker.	8" x 10" x 10"	✓
1 Squeezing	6" x 4" x 8"	✓
1 General	9" x 6" x 10"	✓
2 New Feed	13½" x 10" x 26"	✓
1 F. Water	5" x 5" x 8"	✓
2 Duffins Crapors		

## Spare Gear

- 1/3 Crank Shaft
- 1 Propeller Shaft
- 2 Blades
- 1 Piston Rod & nut
- 2 Valve Spindles
- 1 Eccentric Pulley. Strap rod
- 1 Air Pump Bucket & Rod
- 50 Main Condenser Tubes
- 1 Centrif. Pump Impeller & spindle
- 1 Pair Crank Pin Bushes
- 2 - Crosshead
- 1 - Main bearing
- 1 Set Piston Rings for 1 Engine
- + all gear to Lloyd's Rules extra ✓