

## REPORT ON BOILERS.

Std. No 26014  
WED. NOV. 26. 1913

Date of writing Report 25. 11. 1913 When handed in at Local Office 25. 11. 1913 Port of Middlesbrough  
 No. in Survey held at Stockton-on-Tees Date, First Survey 13th Sept. Last Survey 18th July 1914  
 Reg. Book. on the New Steamer S.S. "Koolonga" (Number of Visits 11) Gross 4260  
 Master J. McDonald Built at Sunderland By whom built Sunderland 43. 6. 2d Tons Net 2632  
 Engines made at Sunderland By whom made North Eastern Marine Co. Ltd. When built 1913-14  
 Boilers made at Stockton By whom made Messrs Riley Bros (No. 4617) When made 1913  
 Registered Horse Power 344 Owners McDonald, McCann, & Phipps Port belonging to Melbourne

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

(Letter for record (S)) Total Heating Surface of Boilers 1330  $\frac{1}{2}$  Is forced draft fitted No. and Description of Boilers One single ended Working Pressure 100 (Tested by hydraulic pressure to 200 Date of test 8. 11. 13  
 No. of Certificate 5188 Can each boiler be worked separately ☒ Area of fire grate in each boiler 37  $\frac{1}{2}$  No. and Description of safety valves to each boiler Two spring loaded ☒ Area of each valve 14.91 Pressure to which they are adjusted 102 lbs.  
 Are they fitted with easing gear Yes ☒ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No ☒  
 Smallest distance between boilers or uptakes and bunkers 18" ☒ Inside Mean dia. of boilers 12'-0" Length 10'-0"  
 Material of shell plates steel Thickness  $\frac{3}{16}$  Range of tensile strength 29-33 Are the shell plates welded or flanged No ☒  
 Descrip. of riveting: cir. seams 2 R. lap long. seams 2 B-2 Riv Diameter of rivet holes in long. seams  $\frac{1}{16}$  Pitch of rivets 5  $\frac{1}{2}$   
 Top of plates or width of butt straps 9"  $\times$   $\frac{3}{16}$  Per centages of strength of longitudinal joint rivets 92.5 Working pressure of shell by rules 100 Size of manhole in shell 19"  $\times$  15" Size of compensating ring 7  $\times$   $\frac{1}{2}$  No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 42" Length of plain part top 74  $\frac{1}{2}$  Thickness of plates crown  $\frac{1}{16}$  bottom  $\frac{1}{16}$   
 Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 106 Combustion chamber plates: Material steel Thickness: Sides  $\frac{9}{16}$  Back  $\frac{9}{16}$  Top  $\frac{9}{16}$  Bottom  $\frac{1}{16}$  Pitch of stays to ditto: Sides 11  $\frac{1}{2}$   $\times$  9 Back 10  $\times$  9  $\frac{1}{2}$   
 Top 11  $\times$  9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 103 Material of stays steel Diameter at smallest part 1.19 Area supported by each stay 95 Working pressure by rules 100 End plates in steam space: Material steel Thickness  $\frac{1}{16}$   
 Pitch of stays 19  $\times$  16 How are stays secured nuts & washers Working pressure by rules 101 Material of stays steel Diameter at smallest part 2.87  
 Area supported by each stay 304 Working pressure by rules 100 Material of Front plates at bottom steel Thickness  $\frac{1}{16}$  Material of lower back plate steel Thickness  $\frac{1}{16}$  Greatest pitch of stays 14  $\times$  9  $\frac{1}{2}$  Working pressure of plate by rules 145 Diameter of tubes 3  $\frac{1}{4}$   
 Pitch of tubes 4  $\frac{1}{2}$   $\times$  4  $\frac{3}{8}$  Material of tube plates steel Thickness: Front  $\frac{1}{16}$  Back  $\frac{5}{16}$  Mean pitch of stays 11  $\frac{1}{8}$  Pitch across wide  
 Spaces 14  $\frac{1}{2}$  Working pressures by rules 113 Girders to Chamber tops: Material steel Depth and thickness of  
 Plate at centre 6  $\frac{1}{2}$   $\times$  1  $\frac{1}{4}$  Length as per rule 27 Distance apart 11 Number and pitch of Stays in each 209  
 Working pressure by rules 106 Superheater or Steam chest: how connected to boiler none Can the superheater be shut off and the boiler worked  
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivets  
 Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness  
 Fitted 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

SURVEY REQUESTED  
 NO. 801 ATTACHED.

FOR THE FOREGOING IS A CORRECT DESCRIPTION,  
 RILEY BROS. BOILERMAKERS LIMITED

Manufacturer.

During progress of work in shops - Sept. 13. 19. Oct. 2. 13. 18. 21. 24. 31. Nov. 3. 6. 8.  
 While building - During erection on board vessel - Jan. 2. Feb. 17. 18.

Is the approved plan of boiler forwarded herewith

Total No. of visits 11

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

This boiler has been built under special survey, is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results. It has been secured in place (in stockhole) mountings fitted and safety valves adjusted under steam.

Survey Fee ... £ 4 : 9 :  
 Travelling Expenses (if any) £ : :  
 When applied for, 191  
 When received, 191

Wm Morrison & William Dutton  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI. FEB. 27. 1914

Signed SA Minute on  
 Std Rpt 26014 attached

005774-005790-0058

Lloyd's Register  
Foundation