

# REPORT ON BOILERS.

No. 9300.

RECEIVED 11 APR. 1916

WED. 14 MAR. 1916

Received at London Office

Date of writing Report 101 When handed in at Local Office 8.4.16 Port of Middlesbrough  
 No. in Survey held at Stockton-on-Tees Date, First Survey Sept 24 Last Survey April 5 1916  
 Reg. Book. on the Donkey Boiler for the R.F.A. "ALMOS" (Number of Visits 5) } Gross  
now named Beechleaf (S.S. No. 649) } Net  
 Master Built at Stockton By whom built Messrs Richardson Duck & Co When built  
 Engines made at Stockton By whom made Messrs Blair & Co Ltd When made 1916  
 Donkey Boilers made at Stockton By whom made Messrs Riley Bros Ltd (No 4818) When made 1916  
 Registered Horse Power Owners Port belonging to

## MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel John Hume & Sons

(Letter for record (S)) Total Heating Surface of Boilers 1140 sq ft Is forced draft fitted no No. and Description of Boilers One single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 5.4.16  
 No. of Certificate 5633 Can each boiler be worked separately yes Area of fire grate in each boiler 85 sq ft No. and Description of safety valves to each boiler 2 direct spring Area of each valve 7.07 sq in Pressure to which they are adjusted 105.16  
 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 or woodwork on upper deck Mean dia. of boilers 11'-0" Length 10'-0"  
 Material of shell plates steel Thickness 19/32 Range of tensile strength 28-32 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 15/16 Pitch of rivets 5 1/2  
 Lap of plates or width of butt straps 9 1/2 Per centages of strength of longitudinal joint rivets 94.8 Working pressure of shell by rules 103 Size of manhole in shell 19" x 15" Size of compensating ring 7" x 1" 9/16" No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 40" Length of plain part 76" Thickness of plates 5/8 crown 5/8 bottom 5/8  
 Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 123 Combustion chamber plates: Material steel Thickness: Sides 17/32 Back 5/8 Top 17/32 Bottom 13/16 Pitch of stays to ditto: Sides 9 1/4 x 8 Back 9 x 10  
 Top 10" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 105 Material of stays steel Diameter at smallest part 1.19 Area supported by each stay 90 Working pressure by rules 106 End plates in steam space: Material steel Thickness 5/8  
 Pitch of stays 20" x 19 1/2" How are stays secured nuts & washers Working pressure by rules 112 Material of stays steel Diameter at smallest part 3.67  
 Area supported by each stay 348 Working pressure by rules 109 Material of Front plates at bottom steel Thickness 63 Material of Lower back plate steel Thickness 64 Greatest pitch of stays 13" x 10" Working pressure of plate by rules 189 Diameter of tubes 3 1/4"  
 Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates steel Thickness: Front 53/64 Back 5/8 Mean pitch of stays 10 3/8" Pitch across wide water spaces 18 1/2" Working pressures by rules 153 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 1/2" x 1 1/2" Length as per rule 28" Distance apart 10" Number and pitch of Stays in each 208"  
 Working pressure by rules 120 Superheater or Steam chest: how connected to boiler none 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

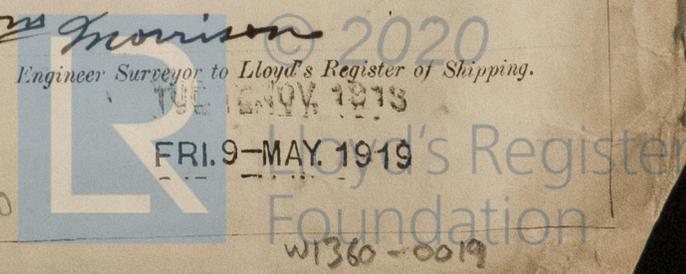
FOR THE FOREGOING IS A CORRECT DESCRIPTION,  
 RILEY BROS. (BOILERMAKERS) LIMITED  
 Manufacturer.

Dates of Survey: During progress of work in shops 1915 Sep 24-27 1916 Mar 22-30 Apr 5.  
 while building: During erection on board vessel - - -  
 Is the approved plan of boiler forwarded herewith yes  
 Total No. of visits 5

GENERAL REMARKS (State quality of workmanship, opinions as to class, &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: The boiler is to be fitted on board at this port. The boiler has now been satisfactorily secured on board, examined under steam and safety valves adjusted - W.M.

Survey Fee ... £ 3-16-0 When applied for, Monthly 1915  
 Travelling Expenses (if any) £ ✓ When received, 191

Committee's Minute FRI. 16 MAR. 1917  
 Assigned See minute on file attached



If not, state whether, and when, one will be sent

Is a Report also sent on the Hull of the Ship?