

REPORT ON BOILERS.

No. 10380.

Received at London Office

MAY 23 1919

Date of writing Report 21/5/1919 When handed in at Local Office 21/5/1919 Port of Middlesbrough
 No. in Survey held at Stockton-on-Tees Date, First Survey 28th Nov 18 Last Survey 17th Mar 1919
 No. of Book 17 (Number of Visits 17) Gross 5260.31
 on the Donkey Boiler for the S.S. PEEBLES ex War Petunia (S.S.N. 675) Tons Net 3217.64
 Master J. G. Potts Built at Stockton By whom built Richardson Duck & Co When built 1919
 Engines made at Stockton By whom made Messrs Blair & Co Lim^d (N^o 1899) When made 1919
 Boilers made at Stockton By whom made Messrs Blair & Co Lim^d (N^o E. 1055) When made 1919
 Registered Horse Power Owners Sutherland Steamship Co^{ys} Port belonging to Newcastle

MULTITUBULAR BOILERS — ~~MAIN AUXILIARY OR~~ DONKEY. — Manufacturers of Steel J. Spencer & Son Lim^d

Letter for record (S) Total Heating Surface of Boilers 1295 sq ft Is forced draft fitted no No. and Description of Boilers One single ended
 No. of Certificate 5975 Can each boiler be worked separately ✓ Area of fire grate in each boiler 33.7 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
 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 dia. of boilers 12'-0" Length 10'-0"
 Material of shell plates Steel Thickness 2/32 Range of tensile strength 28-32 Are the shell plates welded or flanged no
 Description 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 9/16
3 Rivets per pitch rivets 84.5 Working pressure of shell by plate 83.09
 Size of plates or width of butt straps 10 1/4 x 5/8 Per centages of strength of longitudinal joint 110 Size of manhole in shell 20 x 16 Size of compensating ring 4 1/2 x 1 No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 41 9/16 Length of plain part 67 13/16 Thickness of plates 17/32
 Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 108 Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 9/16 Pitch of stays to ditto: Sides 9 3/4 x 9 3/4 Back 9 3/4 x 9 3/4
9 3/4 x 9 3/4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 114 Material of stays steel Area at smallest part 1.41 Area supported by each stay 95.06 Working pressure by rules 118 End plates in steam space: Material steel Thickness 27/32
 Tech of stays 19 x 16 How are stays secured nuts & 7 x 3/4 washers Working pressure by rules 109 Material of stays steel Area at smallest part 3.26
 Area supported by each stay 323 Working pressure by rules 105 Material of Front plates at bottom steel Thickness 13/16 Material of upper back plate steel Thickness 3/4 Greatest pitch of stays 14 x 9 3/4 Working pressure of plate by rules 134 Diameter of tubes 3 1/4
 Tech of tubes 4 1/2 x 4 1/2 Material of tube plates steel Thickness: Front 13/16 Back 3/4 Mean pitch of stays 10 5/8 Pitch across wide inter spaces 14 1/4 Working pressures by rules 116 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 7 1/8 x 1 1/8 Length as per rule 28 1/2 Distance apart 9 3/4 Number and pitch of Stays in each 20 9 1/2
 Working pressure by rules 116 Steam dome: Description of joint to shell none % of strength of joint
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 Tech of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type _____ Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 Date of Test _____ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

SURVEY REQUEST NO. 1486 ATTACHED. The foregoing is a correct description, FOR BLAIR & CO., LIMITED No. 10380 Manufacturer.
 Dates During progress of work in shops - - - 1918. Nov 28. Dec 2. 6. 9. 1919. Jan 17. 20. 22 Is the approved plan of boiler forwarded herewith yes
 while During erection on board vessel - - - 24. 27. 29. Feb 3. 6. 12. 17. Mar 5. 10. 17. Total No. of visits 17

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey in accordance with the Rules and the approved plan. The materials and workmanship are sound and good and on completion the boiler was tested by hydraulic pressure with satisfactory results. The boiler has been satisfactorily secured on board, examined under steam and safety valves adjusted.

Survey Fee £ _____ When applied for, _____ 191 _____
 Travelling Expenses (if any) £ _____ When received, _____ 191 _____

Committee's Minute _____
 Assigned See accompanying fl. rpt
 TUE 27 MAY 1919
 Wm Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.

