

## REPORT ON BOILERS.

No. 34868

Received at London Office

ED. 5-JUN, 1918

Date of writing Report 25-6-1918 When handed in at Local Office

Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 14<sup>th</sup> May, 1914 Last Survey 21-5-1918  
Reg. Book. on the 3 Marine Return Tube Boilers for Messrs Blair & Co. Stockton.

Master Built at Sunderland By whom built W. S. B. Co. (No. 319) When built

Engines made at By whom made When made

Boilers made at Glasgow By whom made Messrs A. &amp; J. Inglis Ltd 9594 When made 1918

Registered Horse Power Owners Port belonging to

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

(Letter for record S) Total Heating Surface of Boilers 4020 sq ft Is forced draft fitted No. and Description of

Boilers 3 Single ended Marine Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 14/2-5-18

No. of Certificate 14285 Can each boiler be worked separately Yes Area of fire grate in each boiler 63.3 sq ft No. and Description of

safety valves to each boiler 2 Direct spring Area of each valve 9.62 Pressure to which they are adjusted

Are they fitted with easing gear 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 Mean dia. of boilers 13' 6" Length 11' 6"

Material of shell plates S Thickness 1 1/4" Range of tensile strength 28/32 Tons Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams D. R. long. seams S. R. D. B. S Diameter of rivet holes in long. seams 1 5/16" Pitch of rivets 9 1/8"

Lap of plates width of butt straps 19 1/2" Per centages of strength of longitudinal joint rivets 88.3% Working pressure of shell by

rules 181 Size of manhole in shell 16" x 12" Size of compensating ring None No. and Description of Furnaces in each

boiler 3 Deighton Material S Outside diameter 4-2 3/16" Length of plain part top Thickness of plates crown 19/32

Description of longitudinal joint Welded No. of strengthening rings 11 Working pressure of furnace by the rules 189 Combustion chamber

plates: Material S Thickness: Sides 23/32 Back 11/16 Top 23/32 Bottom 23/32 Pitch of stays to ditto: Sides 9 1/4 x 10 5/8" Back 9 x 10"

Top 9 1/4 x 10 5/8" Stays are fitted with nuts or riveted heads Yes Working pressure by rules 186 Material of stays S Diameter at

smallest part 2.04 Area supported by each stay 98.28 Working pressure by rules 190 End plates in steam space: Material S Thickness 1 1/32

Pitch of stays 21 3/4 x 20 1/2 How are stays secured D. Rings Working pressure by rules 182 Material of stays S Diameter at smallest part 8.29

Area supported by each stay 446 Working pressure by rules 198 Material of Front plates at bottom S Thickness 3 1/32 Material of

Lower back plate S Thickness 27/32 Greatest pitch of stays 9 x 13 3/8 Working pressure of plate by rules 204 Diameter of tubes 3

Pitch of tubes 4 1/4 Material of tube plates S Thickness: Front 3 1/32 Back 3/4 Mean pitch of stays 12 3/4 x 8 1/4 Pitch across wide

water spaces 13 5/8 Working pressures by rules 181 Girders to Chamber tops: Material S Depth and thickness of

girder at centre 11 x 7 1/8 Length as per rule 38 9/16 Distance apart 10 Number and pitch of Stays in each 3 @ 9 1/4

Working pressure by rules 189 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

The foregoing is a correct description,

William Allardes Manufacturer.

Dates of Survey During progress of 1914 May 14 June 13 July 9 Aug 8 Oct 130 Nov 4 21 5 Is the approved plan of boiler forwarded herewith Yes  
while During erection on 4 24 26 1918 Jan 10 16 22 30 Mar 4 19 22 23 Apr 3 16 18 22 Total No. of visits 30  
building board vessel 24 May 2 13 14 15 14 21

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

The Boilers have been built under special survey in accordance with the approved plan, the Rules of the Society, have been forwarded to Messrs Blair &amp; Co. Stockton. When filling the centre main boiler with water a slight crack was found in the back end plate, this with the approval of the D. B. A. S. has now been electrically

Survey Fee £ 29: 8 When applied for 191  
Travelling Expenses (if any) £ When received 191Harry Clarke & Fred. A. Ferguson  
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW, 4 JUN 1918

Assigned Transmit to London

TUE 24 SEP 1918

Lloyd's Register  
Foundation