

REPORT ON BOILERS.

No. 10491

Received at London Office

MON. 6-8-1919

of writing Report 19 When handed in at Local Office 2/10/19 19 Port of MIDDLESBRO
 in Survey held at Stockton on Tees Date, First Survey 9th May 1919 Last Survey 29th July 1919
 on the Donkey Boiler for the S.S. Clearton (Number of Visits 4) Gross Tons }
 Net Tons }
 Built at Stockton By whom built Richardson Tuck & Co When built 1919
 By whom made Messrs Blair & Co Lim When made 1919
 By whom made Messrs Blair & Co Lim (E.1056) When made 1919
 Owners _____ Port belonging to _____

ULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons
D. Colville & Sons

Total Heating Surface of Boilers 1295 \square 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 29.7.19

of Certificate 6019 Can each boiler be worked separately Area of fire grate in each boiler 33.7 \square No. and Description of

Area of each valve 7.07 \square Pressure to which they are adjusted 105 $\frac{lb}{sq}$

they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Material of shell plates steel Thickness 2 1/32 Range of tensile strength 28-32 Are the shell plates welded or flanged no

Material of rivets: cir. seams 2 R. lap long. seams 2 R. 2 Riv Diameter of rivet holes in long. seams 15 Pitch of rivets 5 3/8

Material of plates or width of butt straps 10 1/4 x 5/8 Per centages of strength of longitudinal joint rivets 84.5 Working pressure of shell by

Size of manhole in shell 20 x 16 Size of compensating ring 4 1/2 x 1 3/4 No. and Description of Furnaces in each

Material steel Outside diameter 41 3/8 Length of plain part 67 1/2 Thickness of plates 17 1/2

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

Working pressure by rules 114 Material of stays steel Area at

Area supported by each stay 95.06 Working pressure by rules 118 End plates in steam space: Material steel Thickness 27/32

Material of stays steel Area at smallest part 3.26

Material of Front plates at bottom steel Thickness 13/16 Material of

Material of tube plates steel Thickness: Front 13/16 Back 3/4 Mean pitch of stays 10 7/8 Pitch across wide

Working pressures by rules 116 Girders to Chamber tops: Material steel Depth and thickness of

Distance apart 9 3/4 Number and pitch of Stays in each 2 @ 9 1/2

Steam dome: description of joint to shell none % of strength of joint

Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____

Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____

Pressure to which each is adjusted _____ Is Easing Gear fitted _____

The foregoing is a correct description,
 FOR BLAIR & CO., LIMITED,
 Manufacturers.

Is the approved plan of boiler forwarded herewith yes

Total No. of visits 4 Return for duplicate Boiler

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 has been satisfactorily secured on
board, examined under steam and safety valves adjusted.

See to be decided in London.

Survey Fee ... £ : : When applied for, ... 19

Travelling Expenses (if any) £ : : When received, ... 19

Wm Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 10. OCT. 1919

