5a.

REPORT ON BOILERS.

No. 10553

Received at London Office WED. DEC. 24. 1919

...riting Report 13.12.19 101 When handed in at Local Office 16.12.19 101 Port of MIDDLESBRO'

... Survey held at Stockton-on-Tees Date, First Survey 17th Oct. Last Survey 12th Dec. 1919

...ok. (Number of Visits 11)

... on the Tons { Gross / Net

Built at By whom built When built

... made at Northwich By whom made Messrs W. J. Yarwood & Sons Ltd When made

...made at Stockton By whom made Messrs Riley Bros Ltd. (No 5233) When made 1919

...red Horse Power Owners Port belonging to

...TITUBULAR BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~.—Manufacturers of Steel Messrs J. Spencer & Sons Ld

... for record (S)) **Total Heating Surface of Boilers** 615 ft² Is forced draft fitted **No. and Description of**

...s One single ended **Working Pressure** 140 Tested by hydraulic pressure to 280 Date of test 12.12.19

... Certificate 6066 Can each boiler be worked separately **Area of fire grate in each boiler** 27 ft² No. and Description of

...valves to each boiler Area of each valve Pressure to which they are adjusted

...y fitted with easing gear In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

...st distance between boilers or uptakes and bunkers or woodwork ~~Mean~~ Inside dia. of boilers 8'-7" Length 8'-6"

...al of shell plates steel Thickness 5/8" Range of tensile strength 28-32 Are the shell plates welded or flanged no

... 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 5½"

...plates or width of butt straps 9" × 5/8" 3 Rivets per pitch Per centages of strength of longitudinal joint rivets 89.1 plate 82.9 Working pressure of shell by

... 142 Size of manhole in shell 19" × 15" Size of compensating ring 7" × 1" McNeil **No. and Description of Furnaces in each**

... 2 plain Material steel Outside diameter 34" Length of plain part top 70¾" bottom 93 11/16 3½ × 3½ × 5/8 S. angle Thickness of plates crown 19/32 bottom 19/32

...ction of longitudinal joint Weld No. of strengthening rings one Working pressure of furnace by the rules 140 Combustion chamber

... Material steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 19/32" Pitch of stays to ditto: Sides 7¾" × 8" Back 8½" × 8¾"

...½" × 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 146 Material of stays steel Area at

... part 1.45 Area supported by each stay 74 Working pressure by rules 157 End plates in steam space: Material steel Thickness 13/16"

...f stays 14/15 × 14½ How are stays secured nuts & 6 × ½ washers to tubes Working pressure by rules 140 Material of stays steel Area at smallest part 3.26

...upported by each stay 232 Working pressure by rules 146 Material of Front plates at bottom steel Thickness 13/16 Material of

...back plate steel Thickness 13/16 Greatest pitch of stays 13" × 8¾" Working pressure of plate by rules 185 Diameter of tubes 3

...f tubes 4" × 4" Material of tube plates steel Thickness: Front 13/16" Back 11/16" Mean pitch of stays 9¼" Pitch across wide

...paces 13 Working pressures by rules 150 Girders to Chamber tops: Material steel Depth and thickness of

...t centre 6" × 1¼" Length as per rule 24" Distance apart 7½" Number and pitch of Stays in each 2 @ 8"

...g pressure by rules 167 Steam dome: ~~description of joint to shell~~ none % of strength of joint

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

...rivets Working pressure of shell by rules Crown plates Thickness How stayed

...HEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

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

... of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

FOR RILEY BROS. (STOCKTON) LIMITED

The foregoing is a correct description,

Manufacturer.

...During progress of ~~1918~~ 1919 work in shops - - } Oct 17.24. Nov. 5.11.19.24.27. Dec. 1.4.8.12. Is the approved plan of boiler forwarded herewith yes

...During erection on board vessel - - - } Total No. of visits 11 Return for duplicate Boiler

---

...ERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special ...ey: is of good material and workmanship and on completion was tested by hydraulic pressure ... satisfactory results

Blue Plan returned 29/4/20 JCS

...ey Fee ... ... £ 2 - 2 - 0 When applied for, Monthly a/c.

...pping ...elling Expenses (if any) £ : : When received, ... 191

Wm Morrison

Engineer Surveyor to Lloyd's Register of Shipping.

...ittee's Minute

...ved

013750 - 013759 - 0137