

REPORT ON BOILERS.

No. 8169

Received at London Office

THU. OCT. 30. 1913

Writing Report 29.10.13

When handed in at Local Office 29.10.13

Port of Middlesbrough

WED. APR. 15. 1914

Survey held at Stockton-on-Tees

Date, First Survey 8th Aug.

Last Survey 24th Oct.

191

Supn the *Thos S.S. Elbray*

(Number of Visits 14) (S.S. No 189)

Tons } Gross }
 } Net }

Built at Newcastle

By whom built *Tyne Iron & S. Co Lim^d*

When built

Repairs made at Stockton

By whom made *Thos Riley Bros Ltd (No. 4500)*

When made 1913

Registered Horse Power

Owners

Port belonging to

LTTUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ **DONKEY.** —Manufacturers of Steel *John Spencer & Sons*

For record (S) Total Heating Surface of Boilers 1375 sq ft Is forced draft fitted *no* No. and Description of

Boilers *One single ended* Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 24.10.13

of Certificate 5178 Can each boiler be worked separately Area of fire grate in each boiler 40 1/2 sq ft No. and Description of

Valves to each boiler 2 direct spring Area of each valve 4.43 sq ft Pressure to which they are adjusted 180 lbs.

They fitted with casing gear *Yes* In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Least distance between boilers or uptakes and bunkers or woodwork *on deck* Mean dia. of boilers 11'-6" Length 12'-8"

Material of shell plates *steel* Thickness 15/16" Range of tensile strength 29-33 Are the shell plates welded or flanged *no*

Kind of riveting: cir. seams 2-R-lap long. seams 2-B-3 Riv Diameter of rivet holes in long. seams 15/16" Pitch of rivets 6 1/4"

Size of plates or width of butt straps 13 3/4" x 15/16" Per centages of strength of longitudinal joint rivets 87.6 Working pressure of shell by

182 Size of manhole in shell 19" x 15" Size of compensating ring 7" x 1" *W. rail* No. and Description of Furnaces in each

2 plain Material *steel* Outside diameter 42" Length of plain part top 87 3/4" Thickness of plates crown 13/16"

Description of longitudinal joint *Weld* No. of strengthening rings *one* Working pressure of furnace by the rules 180 Combustion chamber

Material *steel* Thickness: Sides 2 1/32" Back 5/8" Top 5/8" Bottom 13/16" Pitch of stays to ditto: Sides 9 x 8 1/2" Back 8 x 9"

8 1/4 x 8 1/2" stays are fitted with nuts or riveted heads *nuts* Working pressure by rules 186 Material of stays *steel* Diameter at

least part 1.73 Area supported by each stay 76.5 Working pressure by rules 181 End plates in steam space: Material *steel* Thickness 3/32"

How are stays secured *nuts & 6 x 1/2 washers* Working pressure by rules 180 Material of stays *steel* Diameter at smallest part 4.57

supported by each stay 243 Working pressure by rules 196 Material of Front plates at bottom *steel* Thickness 3/32" Material of

Front back plate *steel* Thickness 3/32" Greatest pitch of stays 14 1/2" x 9" Working pressure of plate by rules 234 Diameter of tubes 3 1/2"

Material of tube plates *steel* Thickness: Front 3/32" Back 13/16" Mean pitch of stays 10 1/2" Pitch across wide

spaces 15" Working pressures by rules 181 Girders to Chamber tops: Material *steel* Depth and thickness of

at centre 9 3/4" x 1 3/4" Length as per rule 39" Distance apart 8 1/4" Number and pitch of Stays in each 3 @ 8 1/2"

Working pressure by rules 181 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

Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

Equipped 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 casing gear

Survey REQUEST NO. 749 ATTACHED.

The foregoing is a correct description, FOR RILEY BROS. (BOILERMAKERS) LTD, Manufacturer.

Dates } During progress of work in shops -- } Aug. 2. 14. 26 Sep. 12. 19. 27. Oct. 2. 7. 9. 13. 18. 21. 23. 24 Is the approved plan of boiler forwarded herewith *yes*

While } During erection on } board vessel --- } see Newcastle Report No. 65870. Total No. of visits 14

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

Survey Fee ... £ 4-12-4 When applied for, MONTHLY 1/6

Travelling Expenses (if any) £ : : When received, 1/6

Wm Morrison & Co
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. JUL. 24. 1914

signed *see minute on file No. 65870* FRI. OCT. 16. 1914

FRI. OCT. - 5 1917.

TUE. SEP. 28. 1915 FRI. 11. JAN. 1916

FRI. 16. JUN. 1916 TUE. NOV. 25. 1919

FRI. 22. DEC. 1916 WED. 11. APR. 1917

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