

REPORT ON BOILERS.

SW. APR. 4 1914
SAT. APR. 4 - 1914

5a. Description of vessel: **3.4.14** When handed in at Local Office **3.4.14** Port of **MIDDLESBRO'**
 Length in Survey held at **Stockton-on-Tees** Date, First Survey **23rd February** Last Survey **31st March 1914**
 Book. on the **Steel Screw Steamer "Pontwen"** (Number of Visits **9**) Tons } Gross }
 } Net }
 Rivets. Built at **Stockton** By whom built **Messrs Richardson Duck & Co** When built
 joint Plates. Stays made at **Stockton** By whom made **Messrs Blair & Co Lim'** When made
 stays. Plates made at **Stockton** By whom made **Messrs Riley Bros Ltd (N^o 4625)** When made **1914**
 int. Indicated Horse Power Owners Port belonging to

TITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel **John Spencer & Sons**
 for record **(5)** Total Heating Surface of Boilers **863 sq ft** Is forced draft fitted **no** No. and Description of
 One single ended ✓ Working Pressure **120** Tested by hydraulic pressure to **240** Date of test **31.3.14**
 Certificate **5266** Can each boiler be worked separately ✓ Area of fire grate in each boiler **29 sq ft** No. and Description of
 valves to each boiler **2 direct spring** Area of each valve **4.91** Pressure to which they are adjusted **125 lb.**
 they fitted with casing gear **yes** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **no**
 distance between boilers or uptakes and bunkers or woodwork **on upper deck** Mean dia. of boilers **10'-0"** Length **15'-0"**
 Material of shell plates **steel** Thickness **5/8"** Range of tensile strength **28-32** Are the shell plates welded or flanged **no**
 Diameter of rivet holes in long. seams **15/16"** Pitch of rivets **5 1/2"**
 Width of butt straps **9 1/2" x 5/8"** Per centages of strength of longitudinal joint rivets **90.5** Working pressure of shell by
 plate **82.9**
 Size of manhole in shell **19" x 15"** Size of compensating ring **7 x 1 1/2"** No. and Description of Furnaces in each
 top **77"** Thickness of plates crown **5/8"**
 bottom **1 1/4"** bottom **7/8"**
 No. of strengthening rings **none** Working pressure of furnace by the rules **151** Combustion chamber
 Material **steel** Thickness: Sides **9/16"** Back **5/8"** Top **9/16"** Bottom **1 1/8"** Pitch of stays to ditto: Sides **10 1/2" x 8"** Back **10" x 10 1/2"**
 If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **125** Material of stays **steel** Diameter at
 largest part **1 1/8"** Area supported by each stay **84** Working pressure by rules **140** End plates in steam space: Material **steel** Thickness **7/8"**
 How are stays secured **nuts & washers** Working pressure by rules **120** Material of stays **steel** Diameter at smallest part **4.11**
 supported by each stay **255** Working pressure by rules **168** Material of Front plates at bottom **steel** Thickness **7/8"** Material of
 back plate **steel** Thickness **7/8"** Greatest pitch of stays **13" x 10 1/2"** Working pressure of plate by rules **190** Diameter of tubes **3 1/2"**
 of tubes **4 5/8" x 4 1/2"** Material of tube plates **steel** Thickness: Front **7/8"** Back **5/8"** Mean pitch of stays **10 1/2"** Pitch across wide
 spaces **14 1/2"** Working pressures by rules **122** Girders to Chamber tops: Material **steel** Depth and thickness of
 at centre **7" x 1 1/2"** Length as per rule **27"** Distance apart **10 1/2"** Number and pitch of Stays in each **2 @ 8"**
 Superheater or Steam chest: how connected to boiler **none** Can the superheater be shut off and the boiler worked
 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
 Thickened 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

FOR THE FOREGOING IS A CORRECT DESCRIPTION,
RILEY BROS. (BOILERMAKERS), LIMITED. Manufacturer.
 SECRETARY

During progress of work in shops - - - Feb. 23, 29, Mar. 12, 14, 20, 23, 27, 30, 31
 Is the approved plan of boiler forwarded herewith **yes**
 Total No. of visits **9**

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 is to be fitted on board at this port. This boiler has now been satisfactorily secured on board, examined under steam and safety valves adjusted.**

Survey Fee ... £ **2 18-0** When applied for, ... 191...
 Travelling Expenses (if any) £ ... : : When received, ... 191...

Committee's Minute **JUN. 9 - 1914**
 signed **See minute on H. attached**
W. Morrison
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.



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