

# REPORT ON BOILERS.

No. **74,297**

Received at London Office TUE. 19 APR. 1921

19 **April** 1920 When handed in at Local Office  
Port of **NEWCASTLE ON TYNE**  
Date, First Survey **Feb 8<sup>th</sup>** Last Survey **April 6<sup>th</sup>** 1921  
No. in Survey held at **Wallsend-on-Tyne** (Number of Visits **3**)  
eg. Book **Serial Single Ended Steel Main Boilers No 343-B.** Tons { Gross   
 on the **Serial Single Ended Steel Main Boilers No 343-B.** Net   
 Built at **Wallsend-on-Tyne** By whom built **The Wallsend Shipway & Engineering Co. Ltd** When made **1921**  
 By whom made **The Wallsend Shipway & Engineering Co. Ltd** When made **1921**  
 Owners **The Commonwealth of Australia** Port belonging to **Sigbee & Macdonald & Co. Ltd**  
 Registered Horse Power **4448** **John Spencer**

**MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.**—Manufacturers of Steel  
Letter for record **S** Total Heating Surface of Boilers **18150** Is forced draft fitted **-** No. and Description of  
Boilers **6 Single ended multitubular** Working Pressure **220** Tested by hydraulic pressure to **-** Date of test **-**  
No. of Certificate **-** Can each boiler be worked separately **-** Area of fire grate in each boiler **Not given** No. and Description of  
Safety valves to each boiler **-** Area of each valve **-** 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 **16-6"** Length **12-8"**  
Material of shell plates **steel** Thickness **1 9/16"** Range of tensile strength **30/34** Are the shell plates welded or flanged **No**  
Descrip. of riveting: cir. seams **8.R.** long. seams **TR:DB** Diameter of rivet holes in long. seams **1 1/32"** Pitch of rivets **10 3/4"**  
Pitch of plates or width of butt straps **23 1/2"** Per centages of strength of longitudinal joint **85.2** Working pressure of shell by  
rules **225** Size of manhole in shell **19"x15"** Size of compensating ring **8 3/8"x1 1/2"** No. and Description of Furnaces in each  
boiler **4 Horizontal** Material **steel** Outside diameter **3-8 1/4"** Length of plain part **top - bottom -** Thickness of plates **8 1/8"**  
Description of longitudinal joint **Melted** No. of strengthening rings **-** Working pressure of furnace by the rules **227** Combustion chamber  
plates: Material **steel** Thickness: Sides **1 1/8"** Back **1 1/8"** Top **1 1/8"** Bottom **1 1/8"** Pitch of stays to ditto: Sides **9x8 1/4"** Back **9 1/2x7 1/4"**  
Top **9x8 1/4"** If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **220** Material of stays **steel** Area at  
smallest part **2.03"** Area supported by each stay **78.75"** Working pressure by rules **246** End plates in steam space: Material **steel** Thickness **1 1/4"**  
Pitch of stays **18x14 1/2"** How are stays secured **double nuts + washers** Working pressure by rules **222** Material of stays **steel** Area at smallest part **7.24"**  
Area supported by each stay **315"** Working pressure by rules **239** Material of Front plates at bottom **steel** Thickness **3 1/2"** Material of  
Lower back plate **steel** Thickness **3 1/2"** Greatest pitch of stays **9 3/4"x15 1/2"** Working pressure of plate by rules **220** Diameter of tubes **2 3/4"**  
Pitch of tubes **4"x4"** Material of tube plates **steel** Thickness: Front **3 1/2"** Back **1 3/8"** Mean pitch of stays **8"x8"** Pitch across wide  
water spaces **14 3/4"** Working pressures by rules **220** Girders to Chamber tops: Material **steel** Depth and thickness of  
girder at centre **10 7/8"x1 1/2"** Length as per rule **3-1 3/32"** Distance apart **8 1/4"** Number and pitch of Stays in each **3-9"**  
Working pressure by rules **225** Steam dome: description of joint to shell **-** Diam. of rivet holes **-**  
Diameter **-** Thickness of shell plates **-** Material **-** Description of longitudinal joint **-** How stayed **-**  
Pitch of rivets **-** Working pressure of shell by rules **-** Crown plates **-** Thickness **-** Tested by Hydraulic Pressure to **-**

**SUPERHEATER.** Type **-** Date of Approval of Plan **-** Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler **-**  
Date of Test **-** Pressure to which each is adjusted **-** Is Easing Gear fitted **-**  
Diameter of Safety Valve **-**

FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED.  
The foregoing is a correct description,  
**John Spencer** Manufacturer.  
Is the approved plan of boiler forwarded herewith **Yes.**

Dates of Survey { During progress of work in shops - - } **Feb 8, 23, Mar 3, Apr 6.**  
while { During erection on board vessel - - - }  
building

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)  
**The plates for these boilers have been flanged and annealed, the manhole doublings have been bent, flanged and annealed, but the rest of the material has not been worked, as the whole of it is to be sent to Australia, and the boilers are to be finished there. The materials and workmanship as far as the latter has gone are good, eligible in our opinion to be fitted on a clamped vessel. The boilers have been despatched to Cockatoo Island Sydney N.S.W.**

Survey Fee ... £ **12 : 12 :** When applied for, **18 April 1921**  
Travelling Expenses (if any) £ : : When received, **13/5/1921**  
**Wm. R. Paton & Co. L. W. Stuart**  
Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute  
Assigned

002846-002852-0351