

Rpt. 5a.

REPORT ON BOILERS.

No. 33801.

WED. APR. 1-1914

Received at London Office

Date of writing Report **1914** When handed in at Local Office **30.3.14** Port of **Glasgow**
 No. in Survey held at **Glasgow** Date, First Survey **5-8-13** Last Survey **24.3.1914**
 Reg. Book. **126** *on the* **J.S. "Saint Robert"** (Number of Visits **28**) Gross **5596**
 Master **W. Bore** Built at **Port Glasgow** By whom built **Russell & Co. 661.** When built **1914**
 Engines made at **Glasgow** By whom made **David Rowan & Co. 608** When made **1914**
 Boilers made at **do** By whom made **do** **608.** When made **1914**
 Registered Horse Power Owners **Rankin Gilman & Co.** Port belonging to **Liverpool**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **Stewart Lloyds Ltd**

(Letter for record **(7)**) Total Heating Surface of Boilers **1250** 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 **10/12/13**
 No. of Certificate **12456** Can each boiler be worked separately **no** Area of fire grate in each boiler **33.5** No. and Description of safety valves to each boiler **Cockburn Double** Area of each valve **5.9** Pressure to which they are adjusted **105**
 Are they fitted with easing gear **Yes** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **no**
 Smallest distance between boilers or uptakes and bunkers or woodwork **abt 2.6** Mean dia. of boilers **12.0** Length **10.0**
 Material of shell plates **steel** Thickness **3/4** Range of tensile strength **28433** Are the shell plates welded or flanged **no**
 Descrip. of riveting: cir. seams **D.R. Lap** long. seams **T.R.L.** Diameter of rivet holes in long. seams **15/16** Pitch of rivets **3.283**
 Lap of plates or width of butt straps **6 1/2** Per centages of strength of longitudinal joint rivets **71.5** Working pressure of shell by rules **102** plate **71.5**
 Size of manhole in shell **16x12** Size of compensating ring **Flanged** No. and Description of Furnaces in each boiler **2 plain** Material **steel** Outside diameter **3.5 1/2** Length of plain part **70** Thickness of plates **9/16** crown **9/16** bottom **7/8** + **7/8**
 Description of longitudinal joint **weld** No. of strengthening rings **none** Working pressure of furnace by the rules **100** Combustion chamber plates: Material **steel** Thickness: Sides **9/16** Back **9/16** Top **9/16** Bottom **7/8** Pitch of stays to ditto: Sides **10 1/2 x 9** Back **10 1/4 x 9 1/2**
 Top **10 1/2 x 9 1/2** If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **114** Material of stays **Iron** Diameter at smallest part **1.76** Area supported by each stay **95** Working pressure by rules **110** End plates in steam space: Material **steel** Thickness **1**
 Pitch of stays **25 x 15** How are stays secured **D. nuts** Working pressure by rules **106** Material of stays **steel** Diameter at smallest part **3.97**
 Area supported by each stay **375** Working pressure by rules **110** Material of Front plates at bottom **steel** Thickness **3/4** Material of Lower back plate **steel** Thickness **5/8** Greatest pitch of stays **12 3/4** Working pressure of plate by rules **107** Diameter of tubes **3 1/4**
 Pitch of tubes **4 1/2 x 4 3/8** Material of tube plates **steel** Thickness: Front **3/4** Back **2 1/32** Mean pitch of stays **12 3/16** Pitch across wide water spaces **14** Working pressures by rules **103** Girders to Chamber tops: Material **steel** Depth and thickness of girder at centre **7 1/2 x 5 1/8 x 2** Length as per rule **32 3/4** Distance apart **9 1/2** Number and pitch of Stays in each **2 at 10 1/2**
 Working pressure by rules **100** Superheater or Steam chest; how connected to boiler **none** Can the superheater be shut off and the boiler worked separately **no**

holes	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		

If stiffened 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 easing gear

The foregoing is a correct description,
 for David Rowan & Co. Manufacturer.

Dates of Survey: During progress of work in shops - - - See accompanying Machinery Report. Is the approved plan of boiler forwarded herewith **Yes**
 while building: During erection on board vessel - - - Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under Special Survey & is of good materials & workmanship. It has been fitted on board as stated Rpt. 4.

Survey Fee ... £ : : When applied for, ... 191
 Travelling Expenses (if any) £ : : When received, ... 191

H Gardner-Smith
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **GLASGOW 31 MAR. 1914**
 Assigned See minute on accompanying machinery report.



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