

REPORT ON BOILERS.

No. 33871.

Received at London Office FRI. JUN. 26 1914.

When handed in at Local Office 15/4/1914 Port of **GLASGOW**

Date, First Survey 14. 11. 13 Last Survey 8. 4. 1914

(Number of Visits 20.) Gross 2023 Tons Net 1211

Survey held at **Glasgow** on the **S.S. Santa Isabel**

Master **A. S. Graham** Built at **Port Glasgow** By whom built **Dunlop Breunor & Co (307)** When built 1914

Engines made at **Port Glasgow** By whom made **Self** When made 1914

Boilers made at **Glasgow** By whom made **Dunsmuir, Jackson & Co 323** When made 1914

Registered Horse Power Owners **Santa Clara S.S. Co. Ltd.** Port belonging to **Liverpool.**

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY~~ OR **DONKEY.**—Manufacturers of Steel **Edwin Spencer Broadman**

Letter for record **S** Total Heating Surface of Boilers **7900** 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 **8. 4. 14**

No. of Certificate **12648** Can each boiler be worked separately **Area of fire grate in each boiler 27** 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 10. 0 1/8 Length 9. 0**

Material of shell plates **S** Thickness **5/8** Range of tensile strength **28/32** Are the shell plates welded or flanged **—**

Description of riveting: cir. seams **DR** long. seams **TRLap** Diameter of rivet holes in long. seams **1** Pitch of rivets **4 1/8**

Gap of plates or width of butt straps **4** Per centages of strength of longitudinal joint rivets **77-6** Working pressure of shell by rules **75-6**

No. of manhole in shell **102** Size of compensating ring **8 1/2** No. and Description of Furnaces in each boiler **2 plain** Material **S** Outside diameter **3-1 1/8** Length of plain part **6-5** Thickness of plates **9/16**

Description of longitudinal joint **weld** No. of strengthening rings **17** Working pressure of furnace by the rules **106** Combustion chamber

Material **S** Thickness: Sides **17/32** Back **9/16** Top **17/32** Bottom **23/32** Pitch of stays to ditto: Sides **8 3/4** Back **9 3/4**

If stays are fitted with nuts or riveted heads **Nuts** Working pressure by rules **119** Material of stays **S** Diameter at smallest part **13/16**

Area supported by each stay **84.75** Working pressure by rules **110** End plates in steam space: Material **S** Thickness **13/16**

How are stays secured **DN** Working pressure by rules **104** Material of stays **S** Diameter at smallest part **3. 03**

Area supported by each stay **276.5** Working pressure by rules **114** Material of Front plates at bottom **S** Thickness **13/16** Material of

Over back plate **S** Thickness **13/16** Greatest pitch of stays **14 1/2** Working pressure of plate by rules **170** Diameter of tubes **3**

Material of tube plates **S** Thickness: Front **13/16** Back **11/16** Mean pitch of stays **12 1/2** Pitch across wide

Working pressures by rules **120** Girders to Chamber tops: Material **Iron** Depth and thickness of

Length as per rule **2-1** Distance apart **9 1/4** Number and pitch of Stays in each **2 at 8 3/4**

Superheater or Steam chest: how connected to boiler **Can the superheater be shut off and the boiler worked**

Thickness of shell plates **Material Description of longitudinal joint Diam. of rivet**

Working pressure of shell by rules **Diameter of flue Material of flue plates Thickness**

End plates: Thickness **How stayed**

Area of safety valves to superheater **Are they fitted with easing gear**

The foregoing is a correct description, **DUNSMUIR & JACKSON, Limited.** Manufacturer.

Is the approved plan of boiler forwarded herewith **Yes**

Total No. of visits

See accompanying Report.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This Boiler has been built under Special Survey in accordance with the approved plan & the workmanship & material are of good quality. This Boiler is being shipped to Port Glasgow at which port it will be fitted on board**

Survey Fee ... **When applied for, 191**

Travelling Expenses (if any) ... **When received, 191**

W. Gordon Munday Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

Signed

