

# REPORT ON BOILERS.

20 JUN 4

Received at London Office

Date of writing Report 19 When handed in at Local Office 16. 6. 1934 Port of Glasgow

No. in Reg. Book. Survey held at Glasgow Date, First Survey 9. 9. 33 Last Survey 12-6-1934

on the new steel S/S "JAMAICA PRODUCER." Number of Visits 94 Tons Gross Net

Master Built at Port Glasgow By whom built Lithgow & Co. Yard No. 868 When built 1934

Engines made at Glasgow By whom made Davie Rowan & Co. Ld. Engine No. 965 When made 1934

Boilers made at Glasgow By whom made Davie Rowan & Co. Ld. Boiler No. 965 When made 1934

Nominal Horse Power Owners Port belonging to

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Lithgow & Co. (Letter for Record (S) ✓)

Total Heating Surface of Boilers 15015 sq ft Is forced draught fitted yes Coal or Oil fired oil

No. and Description of Boilers 5 single ended Working Pressure 225

Tested by hydraulic pressure to 388 Date of test 12-1-34 No. of Certificate 19319 Can each boiler be worked separately yes

Area of Firegrate in each Boiler Area of each set of valves per boiler No. and Description of safety valves to each boiler Two. Improved high lift.

Pressure to which they are adjusted 230 Are they fitted with easing gear yes

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 18" Is oil fuel carried in the double bottom under boilers yes

Smallest distance between shell of boiler and tank top plating 2'-0" Is the bottom of the boiler insulated yes

Largest internal dia. of boilers 16'-3" Length 12'-6" Shell plates: Material steel Tensile strength 30-34 tons

Thickness 1 33/64 Are the shell plates welded or flanged no Description of riveting: circ. seams end DR inter. -

long. seams DBS. TR Diameter of rivet holes in circ. seams F 1 3/8 B 1 1/2 Pitch of rivets F 3.4" B 4.19"

Percentage of strength of circ. end seams plate F 59.5 B 62.7 rivets F 48.3 B 46.4 Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate 85.29 rivets 85.59 combined 87.7 Working pressure of shell by Rules 225

Thickness of butt straps outer 1 9/64 inner 1 17/64 No. and Description of Furnaces in each Boiler Three Deighton

Material steel Tensile strength 26-30 tons Smallest outside diameter 3-10 1/16

Length of plain part top bottom Thickness of plates crown 2 3/32 bottom 2 3/32 Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 228

End plates in steam space: Material steel Tensile strength 26-30 tons Thickness 1 1/16 Pitch of stays 22 3/4 x 19

How are stays secured DN Working pressure by Rules 225

Tube plates: Material front steel back Thickness 15/16 27/32 Working pressure front 229 back 226 (compensated)

Mean pitch of stay tubes in nests 10 1/2 Pitch across wide water spaces 14 Working pressure front back

Girders to combustion chamber tops: Material steel Tensile strength 28-32 tons Depth and thickness of girder

at centre 2 @ 10 3/8 x 7 1/8 Length as per Rule 38 7/16 Distance apart 8 3/4 No. and pitch of stays

in each 3 @ 9 1/4 Working pressure by Rules 226 Combustion chamber plates: Material steel

Tensile strength 26-30 tons Thickness: Sides 23/32 Back 23/32 Top 23/32 Bottom 7/8

Pitch of stays to ditto: Sides 9 1/2 x 8 1/8 Back 8 3/4 x 9 Top 9 1/4 x 8 3/4 Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 225 Front plate at bottom: Material steel Tensile strength 26-30 tons

Thickness 15/16 Lower back plate: Material steel Tensile strength 26-30 tons Thickness 27/32

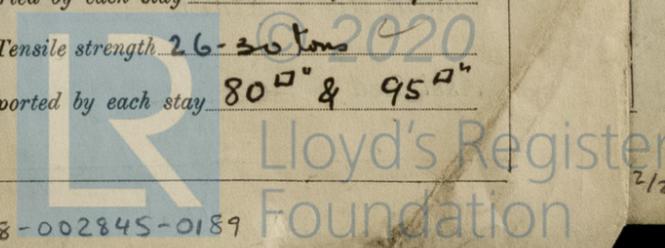
Pitch of stays at wide water space 13 1/2 Are stays fitted with nuts or riveted over nuts

Working Pressure 225 Main stays: Material steel Tensile strength 28-32 tons

Diameter At body of stay, 3 1/2 & 3 3/4 No. of threads per inch 6 Area supported by each stay 461 sq in & 374 sq in

Working pressure by Rules 235 & 248 Screw stays: Material steel Tensile strength 26-30 tons

Diameter At turned off part, 1 3/4 & 1 1/8 No. of threads per inch 9 Area supported by each stay 80 sq in & 95 sq in



Working pressure by Rules 225 & 225 Are the stays drilled at the outer ends no Margin stays: Diameter <sup>At turned off part,</sup> 1 7/8"  
 No. of threads per inch 9 Area supported by each stay 95" Working pressure by Rules 225  
 Tubes: Material Iron External diameter <sup>Plain</sup> 3" <sup>Stay</sup> 3" Thickness <sup>8 wg.</sup> 5/16" & 3/8" No. of threads per inch 9  
 Pitch of tubes 4 1/4" x 4 1/8" Working pressure by Rules 250 Manhole compensation: Size of opening in  
 shell plate 19 1/2" x 15 1/2" Section of compensating ring 10 1/2" x 1 3/4" No. of rivets and diameter of rivet holes 34 @ 1 9/16"  
 Outer row rivet pitch at ends 10 9/8" Depth of flange if manhole flanged 3" Steam Dome: Material none  
 Tensile strength \_\_\_\_\_ Thickness of shell \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_  
 Diameter of rivet holes \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Percentage of strength of joint <sup>Plate</sup> \_\_\_\_\_  
 Internal diameter \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_ Thickness of crown \_\_\_\_\_ No. and diameter of  
 stays \_\_\_\_\_ Inner radius of crown \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_  
 How connected to shell \_\_\_\_\_ Size of doubling plate under dome \_\_\_\_\_ Diameter of rivet holes and pitch  
 of rivets in outer row in dome connection to shell \_\_\_\_\_

Type of Superheater Smoke tube Manufacturers of <sup>Tubes</sup> N.E. Mains. See Nuc Rpt No. C1500  
<sup>Steel castings</sup> herewith  
 Number of elements \_\_\_\_\_ Material of tubes \_\_\_\_\_ Internal diameter and thickness of tubes \_\_\_\_\_  
 Material of headers \_\_\_\_\_ Tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ Can the superheater be shut off and  
 the boiler be worked separately no Is a safety valve fitted to every part of the superheater which can be shut off from the boiler yes  
 Area of each safety valve 1.76" Are the safety valves fitted with easing gear yes Working pressure as per  
 Rules 225 lb Pressure to which the safety valves are adjusted 232 lb Hydraulic test pressure:  
 tubes \_\_\_\_\_, castings \_\_\_\_\_ and after assembly in place 450 lb Are drain cocks or valves fitted  
 to free the superheater from water where necessary yes  
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

The foregoing is a correct description,  
 For David Rowan & Co. Ltd Manufacturer.  
Arch. H. Triverson

Dates of Survey <sup>During progress of</sup> work in shops - - Are the approved plans of boiler and superheater forwarded herewith yes  
<sup>while</sup> building <sup>During erection on</sup> board vessel - - (If not state date of approval.)  
**SEE ACCOMPANYING MACHINERY REPORT.**

Is this Boiler a duplicate of a previous case no If so, state Vessel's name and Report No. \_\_\_\_\_

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)  
The materials and workmanship are good.  
The boilers have been constructed under special survey, satisfactorily fitted in the vessel  
and their safety valves adjusted under steam.  
11/6/34

Survey Fee ... .. £ 19 When applied for, \_\_\_\_\_  
 Travelling Expenses (if any) £ 19 When received, \_\_\_\_\_

Schwans  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 19 JUN 1934

Assigned SEE ACCOMPANYING MACHINERY REPORT.

