

# REPORT ON BOILERS.

Received at London Office 24 JUN 1936

Date of writing Report 15.5 1936 When handed in at Local Office 18<sup>th</sup> JUNE 1936. Port of Greenock

No. in Reg. Book. Survey held at Greenock Date, First Survey 4<sup>th</sup> OCTOBER 1935. Last Survey 17-6-1936

on the S/S "Jalayamma" (Number of Visits ) Gross 4980.99 Tons Net 3049.61

Master [Signature] Built at Pr Glasgow By whom built Lithgow L<sup>a</sup> Yard No. 882 When built 1936

Engines made at Greenock By whom made John Traquair & Co<sup>l</sup> Engine No. 677 When made 1936

Boilers made at ditto By whom made ditto Boiler No. 677 When made 1936

Nominal Horse Power Owners Semara S & Co<sup>l</sup> Port belonging to Roulay

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

Manufacturers of Steel Balvill Scottish & S. The Walsley Son, Bargo Fuld & Co (Letter for Record R )

Total Heating Surface of Boilers 4563 # Is forced draught fitted Yes  Coal Coal  fired Coal

No. and Description of Boilers 3 Single Ended Working Pressure 220

Tested by hydraulic pressure to 380 Date of test 7.5.36 No. of Certificate 2053 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 6325 # No. and Description of safety valves to each boiler one Double Spring

Area of each set of valves per boiler 13.4 # Pressure to which they are adjusted 225 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 1-9 Is oil fuel carried in the double bottom under boilers No

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 14.10 9/16" Length 11-6" Shell plates: Material S Tensile strength 29.33

Thickness 1 7/16" Are the shell plates welded or flanged Yes Description of riveting: circ. seams DR

long. seams TRIDBS Diameter of rivet holes in circ. seams 1 15/32" Pitch of rivets 4.155

Percentage of strength of circ. end seams 64.6 Percentage of strength of circ. intermediate seam 85.3

Percentage of strength of longitudinal joint 85.9 Working pressure of shell by Rules 221

Thickness of butt straps 1 3/32" No. and Description of Furnaces in each Boiler 3 Motionless

Material S Tensile strength 26.30 Smallest outside diameter 3.9 1/2"

Length of plain part — Thickness of plates 3/4" Description of longitudinal joint weld.

Dimensions of stiffening rings on furnace or c.c. bottom — Working pressure of furnace by Rules 243

End plates in steam space: Material S Tensile strength 26.30 Thickness 1 1/32" Pitch of stays 21 1/8 3/4"

How are stays secured DN Washers Working pressure by Rules 222

Tube plates: Material S Tensile strength 26.30 Thickness 7/8"

Mean pitch of stay tubes in nests 8 5/8" Pitch across wide water spaces 13 1/2" Working pressure 241

Girders to combustion chamber tops: Material S Tensile strength 29.33 Depth and thickness of girder

at centre 10 3/4 (2) Length as per Rule 2.9 5/8" Distance apart 8 1/4" No. and pitch of stays

in each 3 at 8" Working pressure by Rules 230 Combustion chamber plates: Material S

Tensile strength 26.30 Thickness: Sides 1 1/16" Back 1 1/16" Top 1 1/16" Bottom 1 3/16"

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

Working pressure by Rules 229 Front plate at bottom: Material S Tensile strength 26.30

Thickness 7/8" Lower back plate: Material S Tensile strength 26.30 Thickness 7/8"

Pitch of stays at wide water space 14" Are stays fitted with nuts or riveted over Nuts

Working Pressure 226 Main stays: Material S Tensile strength 28.32

Diameter 3 1/4" No. of threads per inch 6 Area supported by each stay 393.75 #

Working pressure by Rules 236 Screw stays: Material Iron Tensile strength 21 1/2 #

Diameter 1 3/4" No. of threads per inch 9 Area supported by each stay 72 #



Working pressure by Rules **248** (Are the stays drilled at the outer ends **910** Margin stays: Diameter **17/8.2"** At turned off part. **17/8.2"** Over threads **-**)  
 No. of threads per inch **9** Area supported by each stay **96 3/4"** Working pressure by Rules **221**  
 Tubes: Material **Iron** External diameter **2 1/2"** Thickness **9/16 3/8 5/16** No. of threads per inch **9**  
 Pitch of tubes **3 5/8 x 3 1/16"** Working pressure by Rules **241** Manhole compensation: Size of opening in shell plate **16 1/2 x 20 1/2"** Section of compensating ring **3 1/2 x 2 8/12 x 1 5/32** No. of rivets and diameter of rivet holes **42, at - 1 15/32**  
 Outer row rivet pitch at ends **10"** Depth of flange if manhole flanged **3 1/2"** Steam Dome: Material **-**  
 Tensile strength \_\_\_\_\_ Thickness of shell \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_  
 Diameter of rivet holes \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Percentage of strength of joint **Plate Rivets**  
 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 \_\_\_\_\_ Manufacturers of **Tubes Steel castings**  
 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 \_\_\_\_\_  
 Area of each safety valve \_\_\_\_\_ Are the safety valves fitted with easing gear \_\_\_\_\_ Working pressure as per Rules \_\_\_\_\_ Pressure to which the safety valves are adjusted \_\_\_\_\_ Hydraulic test pressure: tubes \_\_\_\_\_ castings \_\_\_\_\_ and after assembly in place \_\_\_\_\_ Are drain cocks or valves fitted to free the superheater from water where necessary \_\_\_\_\_  
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with \_\_\_\_\_

The foregoing is a correct description,  
 For JOHN G. KINCAID & CO. LIMITED, Manufacturer.  
*W. Gordon* Director

Dates of Survey **During progress of work in shops - -** Are the approved plans of boiler and superheater forwarded herewith? **11/10/1936**  
 while building **During erection on board vessel - - -** (If not state date of approval.)  
 SEE MACHINERY REPORT. Total No. of visits **1**

Is this Boiler a duplicate of a previous case **Yes** If so, state Vessel's name and Report No. **S/S Jalaganga & Ref: 20151**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)  
**These Boilers have been built under Special Survey in accordance with the approved plans & the workmanship, material are of good quality. They have now been securely fitted on board. Also Report accompanies that of the Machinery**

Survey Fee **£ 100** When applied for, **19**  
 Travelling Expenses (if any) £ **0** When received, **19**

*W. Gordon*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 23 JUN 1936**

Assigned SEE ACCOMPANYING MACHINERY REPORT.

