

Rpt. 5a.

## REPORT ON BOILERS.

No. 20300.

Received at London Office

20 JAN 1937

Date of writing Report 16.12.36 When handed in at Local Office 15th JANUARY 1937 Port of Greenock

No. in Survey held at Greenock Date, First Survey 3rd JUNE 1936 Last Survey 12th JANUARY 1937  
Reg. Book. on the M/S "Regent Lion" (Number of Visits 1) Gross 9551 Tons Net 5794Master Built at Newcastle By whom built Susan Kwikie Wigham Yard No 1521 When built 1937  
Engines made at Greenock By whom made John Wigham & Co. Ltd Engine No. 1104 When made 1937  
Boilers made at ditto By whom made ditto Boiler No. 1104 When made 1937  
Nominal Horse Power Owners TC Bourne & Co. Ltd Port belonging to LondonMULTITUBULAR BOILERS MAIN, AUXILIARY, ~~OR DONKEY~~.

Manufacturers of Steel Sae Co of Scotland, Colville Cargo Fleet (Letter for Record S)

Total Heating Surface of Boilers 1210 sq ft Is forced draught fitted Yes Coal or Oil fired Oil

No. and Description of Boilers one Single Ended Working Pressure 180

Tested by hydraulic pressure to 320 Date of test 30.11.36 No. of Certificate 2078 Can each boiler be worked separately -

Area of Firegrate in each Boiler 3.9 sq ft No. and Description of safety valves to each boiler backburn imposed high left

Area of each set of valves per boiler per Rule 3.9 sq ft as fitted 4.8 sq ft 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 - Is oil fuel carried in the double bottom under boilers -

Smallest distance between shell of boiler and tank top plating - Is the bottom of the boiler insulated -

Largest internal dia. of boilers 11-2 3/32" Length 10-6' Shell plates: Material S Tensile strength 29.33

Thickness 29/32" Are the shell plates welded or flanged - Description of riveting: circ. seams end DR inter. 2-6 1/4

long. seams TR &amp; DBS Diameter of rivet holes in circ. seams 15/16" Pitch of rivets 6 1/8"

Percentage of strength of circ. end seams plate 64.2 rivets 46.1 Percentage of strength of circ. intermediate seam plate rivets -

Percentage of strength of longitudinal joint plate 85.2 rivets 86.4 combined 84.4 Working pressure of shell by Rules 181

Thickness of butt straps outer 11/16" inner 13/16" No. and Description of Furnaces in each Boiler 2 Delightous

Material S Tensile strength 26.30 Smallest outside diameter 3-0 15/16"

Length of plain part top bottom Thickness of plates crown 9 15/32" Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom - Working pressure of furnace by Rules 182

End plates in steam space: Material S Tensile strength 26.30 Thickness 1 1/32" Pitch of stays 16 1/2 x 16 1/2"

How are stays secured DN &amp; Washdown Working pressure by Rules 181

Tube plates: Material front back S Tensile strength 26-30 Thickness 1 1/4"

Mean pitch of stay tubes in nests 10.49" Pitch across wide water spaces 14" Working pressure front 185 back 201

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

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

in each 2 at 10" Working pressure by Rules 188 Combustion chamber plates: Material S

Tensile strength 26.30 Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 2 1/32"

Pitch of stays to ditto: Sides 8 x 10" Back 9 x 9 1/4" Top 10 x 8" Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 183 Front plate at bottom: Material S Tensile strength 26-30

Thickness 1" Lower back plate: Material S Tensile strength 26-30 Thickness 2 1/32"

Pitch of stays at wide water space 13 3/4" Are stays fitted with nuts or riveted over Nuts

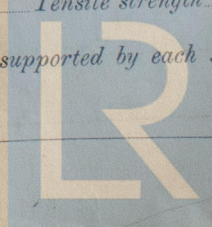
Working Pressure 188 Main stays: Material S Tensile strength 28.32

Diameter At body of stay, 2 1/2" No. of threads per inch 6 Area supported by each stay 242.25 sq in

Over threads - Working pressure by Rules 196 Screw stays: Material S Tensile strength 26-30

Diameter At turned off part, 1 5/8" No. of threads per inch 9 Area supported by each stay 83.25 sq in

Over threads -



Lloyd's Register Foundation



Working pressure by Rules 183 Are the stays drilled at the outer ends No Margin stays: Diameter 1 3/4"  
 No. of threads per inch 9 Area supported by each stay 90.125" Working pressure by Rules 181  
 Tubes: Material Iron External diameter 3" Thickness 9 W G 5/16" 1/4" 3/8" No. of threads per inch 9  
 Pitch of tubes 4 1/4" x 4 5/16" Working pressure by Rules 193 Manhole compensation: Size of opening in  
 shell plate 16" x 20" Section of compensating ring 2' 9" x 2' 6" x 1 1/2" No. of rivets and diameter of rivet holes 28 at 1 1/2"  
 Outer row rivet pitch at ends 7 5/8" 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  
 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  
 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 Is a safety valve fitted to every part of the superheater which can be shut off from the boiler  
 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.  
W. G. Kincaid Director. Manufacturer.

Dates of Survey while building { During progress of work in shops - - - }  
 { During erection on board vessel - - - }  
 SEE MACHINERY REPORT. Are the approved plans of boiler and superheater forwarded herewith Yes  
 (If not state date of approval.)  
 Total No. of visits

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.) This Boiler was built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. This Report accompanies trial of the Machinery.

This Donkey Boiler has been satisfactorily fitted on board. The Safety valves were adjusted to 180 lbs/p and the accumulation test was satisfactory.

Adlath  
Newcastle on Tyne  
26/3/37

Survey Fee Charged on Maily Ref. When applied for, 19  
 Travelling Expenses (if any) : When received, 19  
W. G. Gordon. M. S. C. I.  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 19 JAN 1937 FRI 2 APR 1937

Assigned SEE ACCOMPANYING MACHINERY REPORT.

See Nwc 94861