

# REPORT ON BOILERS.

No. 20281.

16 DEC 1936

Received at London Office

Date of writing Report 26-10-36 When handed in at Local Office 10th Dec. 1936 Port of Greenock

W.G.M. 22-10-36

No. in Survey held at Greenock Date, First Survey 19th December 1935 Last Survey 1st December 1936

on the M/S "British Triumph" (Number of Visits ✓) Tons { Gross 5402.11 Net 5004.91

Master J.M. Built at Glasgow By whom built Lithgous & Co. Yard No. 886 When built 1936

Engines made at Greenock By whom made John & Maccaid & Co. Engine No. 1194 When made 1936

Boilers made at ditto By whom made ditto Boiler No. 1194 When made 1936

Nominal Horse Power Owners British Tanker Co. Port belonging to London.

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

Manufacturers of Steel Colville & Cargo Fleet Co. (Letter for Record S)

Total Heating Surface of Boilers 2461 # Is forced draught fitted Yes Coal or Oil fired Oil

No. and Description of Boilers one Single Banded Working Pressure 150

Tested by hydraulic pressure to 245 Date of test 14.6.36 No. of Certificate 2059 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler Oil Fuel No. and Description of safety valves to each boiler Cochran's High Lift

Area of each set of valves per boiler { per Rule 9.046 as fitted 9.816 Pressure to which they are adjusted 155 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 1-8 Is oil fuel carried in the double bottom under boilers No

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

Largest internal dia. of boilers 13'-4 3/16" Length 11'-6" Shell plates: Material S Tensile strength 29.33

Thickness 29/32" Are the shell plates welded or flanged Yes Description of riveting: circ. seams { end DR inter. 2.609

Welding seams TR+DBS Diameter of rivet holes in { circ. seams 15/16" long. seams 29/32" Pitch of rivets { 6 1/8"

Percentage of strength of circ. end seams { plate 64 rivets 46.5 Percentage of strength of circ. intermediate seam { plate rivets

Percentage of strength of longitudinal joint { plate 85.2 rivets 86.4 combined 84.69 Working pressure of shell by Rules 151

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

Material S Tensile strength 26-30 Smallest outside diameter 2-11 7/8"

Length of plain part { top bottom Thickness of plates { crown 7/16" bottom Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 174

End plates in steam space: Material S Tensile strength 26-30 Thickness 15/32" Pitch of stays 22 x 18"

How are stays secured DN + Washdown Working pressure by Rules 152

Tube plates: Material { front S back S Tensile strength { 26-30 Thickness { 11/16"

Mean pitch of stay tubes in nests 9 3/5" Pitch across wide water spaces 13 1/2" Working pressure { front 163 back 185

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

at centre 8 x 3/4 (2) Length as per Rule 2'-6 9/16" Distance apart 9" No. and pitch of stays

at each 3 at 4 1/4" Working pressure by Rules 140 Combustion chamber plates: Material S

Tensile strength 26-30 Thickness: Sides 5/8" Back 3/4" Top 5/8" Bottom 11/16"

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

Working pressure by Rules 159 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

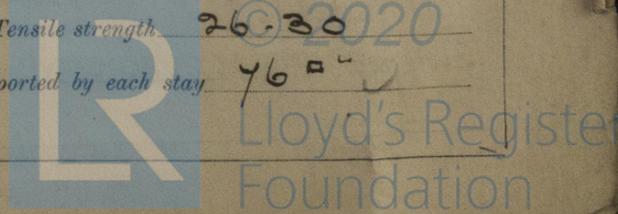
Working Pressure 160 Main stays: Material S Tensile strength 28-32

Diameter { At body of stay, 2 3/4" or Over threads No. of threads per inch 6 Area supported by each stay 396 #

Working pressure by Rules 165 Screw stays: Material S Tensile strength 26-30

Diameter { At turned off part, 1 1/2" or Over threads No. of threads per inch 9 Area supported by each stay 76 #

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Working pressure by Rules 165 ✓ Are the stays drilled at the outer ends 80 ✓ Margin stays: Diameter { At turned off part, 13/4 ✓  
 Over threads ✓  
 No. of threads per inch 9 ✓ Area supported by each stay 104.5 ✓ Working pressure by Rules 173  
 Tubes: Material Iron External diameter { Plain } 2 1/2" ✓ Thickness { 10 WG } No. of threads per inch 9  
 Pitch of tubes 3 3/4" x 3 3/4" ✓ Working pressure by Rules 184 ✓ Manhole compensation: Size of opening  
 shell plate 16 x 20" Section of compensating ring 29" x 25" x 1 1/16" No. of rivets and diameter of rivet holes 38 el- 1 1/8"  
 Outer row rivet pitch at ends 4 5/8" Depth of flange if manhole flanged 3 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  
 stays Inner radius of crown Working pressure by Rules  
 How connected to shell Size of doubling plate under dome Diameter of rivet holes and  
 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  
 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  
 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.  
 M. C. Director.

Dates of Survey { During progress of } Are the approved plans of boiler and superheater forwarded herewith Yes  
 work in shops - - - (If not state date of approval.)  
 while building { During erection on }  
 board vessel - - - 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 has been built under special survey in accordance with the approved plans. The workmanship & material are of good quality & is now securely fitted on board. Plus Repair accomplished Flat of the Machinery.

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

M. C. Gordon, Muclius  
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute GLASGOW 15 DEC 1936

Assigned SEE ACCOMPANYING MACHINERY REPORT.



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