

REPORT ON BOILERS.

Sld. No. 32378
Mails No. 16251

FEB 5 1938

Received at London Office

Date of writing Report _____ When handed in at Local Office 3. 2. 1938 Port of Middlesbrough

No. in Reg. Book _____ Survey held at Stockton Date, First Survey 30 Nov/37 Last Survey 28 Jan/38

on the M.V. "LADY GLANELY" (Number of Visits 9) Tons {Gross 5497
Net 3232

Master J.M. Built at Sunderland By whom built Wm. Bayford & Sons Ltd. Yard No. 640 When built 1938

Engines made at Sunderland. By whom made Wm. Bayford & Sons Engine No. 640 When made 1938

Boilers made at Stockton By whom made Stockton Chemical Eng'rs Boiler No. 6256 When made 1938

Nominal Horse Power 516. Owners Latent Ste. Nav. Co. Ltd. Port belonging to Cardiff.

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

Manufacturers of Steel Colvilles & Steel Co of Scotland Ltd. (Letter for Record S)

Total Heating Surface of Boilers 1660 sq. ft. Is forced draught fitted Yes. Coal or Oil fired Oil.

No. and Description of Boilers 1SB Working Pressure 120 lbs

Tested by hydraulic pressure to 230 Date of test 28. 1. 38 No. of Certificate 6931. Can each boiler be worked separately Yes.

Area of Firegrate in each Boiler _____ No. and Description of safety valves to each boiler 2 Direct Springs.

Area of each set of valves per boiler {per Rule 15.4 sq. in.
as fitted 19.2 sq. in. Pressure to which they are adjusted 120 Are they fitted with easing gear Yes.

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes.

Smallest distance between boilers or uptakes and bunkers or woodwork 2'-6" Is oil fuel carried in the double bottom under boilers Yes.

Smallest distance between shell of boiler and tank top plating 2'-6" Is the bottom of the boiler insulated Yes.

Largest internal dia. of boilers 11'-10 7/8" Length 11'-6" Shell plates: Material Steel Tensile strength 29/33

Thickness 1/16" Are the shell plates welded or flanged No Description of riveting: circ. seams {end NR
inter. Yes

long. seams DR. DRS. Diameter of rivet holes in {circ. seams 1 1/16"
long. seams 1 3/16" Pitch of rivets {circ. seams 3 7/8"
long. seams 5 3/8"

Percentage of strength of circ. end seams {plate 68.5
rivets 45.6 Percentage of strength of circ. intermediate seam {plate 84.9
rivets 83.8

Percentage of strength of longitudinal joint {plate 84.9
rivets 83.8 Working pressure of shell by Rules 123 lbs

Thickness of butt straps {outer 9/16"
inner 1/16" No. and Description of Furnaces in each Boiler 2 cf.

Material Steel Tensile strength 26-30 Smallest outside diameter 3'-11 1/2"

Length of plain part {top Yes
bottom Yes Thickness of plates {crown 13/32"
bottom 13/32" Description of longitudinal joint weld.

Dimensions of stiffening rings on furnace or c.c. bottom Yes Working pressure of furnace by Rules 121 lbs

End plates in steam space: Material Steel Tensile strength 26-30 Thickness 27/32 Pitch of stays 17 x 16"

How are stays secured DNTW. Working pressure by Rules 142 lbs

Tube plates: Material {front Steel
back Steel Tensile strength {front 26-30
back 26-30 Thickness {front 13/16"
back 13/16"

Mean pitch of stay tubes in nests 9 3/8" Pitch across wide water spaces 14" Working pressure {front 157
back 249

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

at centre 7' x 7 7/8" double Length as per Rule 30 1/2" Distance apart 9" No. and pitch of stays _____

in each 2 @ 9 1/2" Working pressure by Rules 126 lbs. Combustion chamber plates: Material Steel

Tensile strength 26-30 Thickness: Sides 19/32" Back 9/16" Top 19/32" Bottom 7/8"

Pitch of stays to ditto: Sides 9 x 9 7/8" main Back 9 1/2" x 8 3/4" Top 9 x 9 1/2" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 129 lbs Front plate at bottom: Material Steel Tensile strength 26-30

Thickness 27/32" Lower back plate: Material Steel Tensile strength 26-30 Thickness 27/32"

Pitch of stays at wide water space 13 1/2" x 9 1/2" Are stays fitted with nuts or riveted over nuts

Working Pressure 201 lbs. Main stays: Material Steel Tensile strength 28-32

Diameter {At body of stay, 2 1/4"
or
Over threads _____ No. of threads per inch 6 Area supported by each stay 288.4 sq. in.

Working pressure by Rules 120 lbs Screw stays: Material Steel Tensile strength 26-30

Diameter {At turned off part, 1 3/8"
or
Over threads _____ No. of threads per inch 9 Area supported by each stay 84

Working pressure by Rules 120 lbs. Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, 1 7/8" or Over threads 1 7/8"

No. of threads per inch 9 Area supported by each stay 100 Working pressure by Rules 152 lbs.

Tubes: Material 2 1/2" Mild iron External diameter { Plain 2 1/2" Stay 2 1/2" Thickness { 3/16" No. of threads per inch 9

Pitch of tubes 3 3/4" 3 3/4" Working pressure by Rules P. 315 Stay 276 Manhole compensation: Size of opening in shell plate 20" x 16" Section of compensating ring 7" x 1" No. of rivets and diameter of rivet holes 44 - 1 5/16"

Outer row rivet pitch at ends 6 3/4" Depth of flange if manhole flanged ✓ 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 _____

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 yes and on behalf of Stockton Chemical Engineers, Riley Boilers Ltd. The foregoing is a correct description, G. H. Riley Manufacturer. DIRECTOR.

Dates of Survey { During progress of work in shops - - - } 1917 Nov 30 Dec 7 16 23 1918 Jan 5 10 Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) _____

while building { During erection on board vessel - - - } _____ Total No. of visits 9

Is this Boiler a duplicate of a previous case yes. If so, state Vessel's name and Report No. Old Rpt 15541

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The boiler has been made under special survey in accordance with the approved plan & the requirements of the rules.

The materials & workmanship are good & the boiler was found sound & tight under hydraulic test. The boiler is to be forwarded to Sunderland.

This boiler has been securely fixed on board the vessel, examined under steam, safety valves adjusted to working pressure & accumulation test carried out satisfactorily.

In recommendation please see enclos. Rpt

G. H. Riley

Survey Fee ... £ 11 : 2 : 0 When applied for, 4 - 2 - 1938

Travelling Expenses (if any) £ : : When received, 6 . 5 . 1938

Robert M. Pitt
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 20 MAY 1938

Assigned Su Sea 32378

Date of ...
No. i ...
Reg. B ...
Master ...
Boilers ...
Owners ...
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Made ...
tested ...
No. of ...
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Certificate (if required) to be sent to ...
The Surveyors are requested not to write on or below the space for Committee's Minute.