

REPORT ON BOILERS.

Received at London Office 28 SEP 1927

Date of writing Report 19... When handed in at Local Office 28th Sept 1927 Port of *Beefac*

No. in Survey held at *Beefac* Reg. Book Date, First Survey 2nd August Last Survey 1st Sept 1927

on the *Air Reservoir No. 7439* (Number of Visits 5) Tons } Gross }
 M. V. "PACHECO" Net }

Built at By whom built Yard No. When built

Engines made at By whom made Engine No. When made

Boilers made at By whom made Boiler No. When made

Owners Port belonging to

AIR RESERVOIR VERTICAL DONKEY BOILER.

Made at *Beefac* By whom made *Harland & Wolff Ltd.* No. *7439* When made *1927* Where fixed

Manufacturers of Steel *D. Colville & Son Ltd.*

CAPACITY OF RESERVOIR *610* Is forced draught fitted Coal or Oil fired

No. and Description of Boilers *ONE DOME-ENDED CYLINDRICAL BUILT* Working pressure *356 LBS.*

Tested by hydraulic pressure to *585 LBS.* Date of test *20. 9. 27* Lloyd's No. of Certificate *56*

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler

Area of each set of valves per boiler } per rule... Pressure to which they are adjusted Are they fitted with easing gear

State whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers

or woodwork Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated Largest internal dia. of boiler *76 3/16"* LENGTH *21' 9"* Height

Shell plates: Material *STEEL* Tensile strength *28-32 TONS* Thickness *1 3/32"*

Are the shell plates welded or flanged *No* Description of riveting: circ. seams { end... *D. R.* } long. seams *T. R. J. B. S.*

Dia. of rivet holes in { circ. seams... *1 5/16"* } Pitch of rivets { *3.36"* } Percentage of strength of circ. seams { plate... *60.9* } of Longitudinal joint { plate... *85.1*

Working pressure of shell by rules *378 LBS.* Thickness of butt straps { outer... *27/32"* } inner... *31/32"*

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat *DISHED PARTIAL SPHERICAL* Material *STEEL*

Tensile strength *26-30 TONS* Thickness *1 3/32"* *1 1/32"* Radius *51"* Working pressure by rules *358 LBS.*

Description of Furnace: Plain, spherical, or dished crown Material Tensile strength

Thickness External diameter { top... } Length as per rule Working pressure by rules

Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Diameter of stays over thread Radius of spherical or dished furnace crown Working pressure by rule

Thickness of Ogee Ring Diameter as per rule { D... } Working pressure by rule

Combustion Chamber: Material Tensile strength Thickness of top plate

Radius if dished Working pressure by rule Thickness of back plate Diameter if circular

Length as per rule Pitch of stays Are stays fitted with nuts or riveted over

Diameter of stays over thread Working pressure of back plate by rules

Tube Plates: Material { front... } Tensile strength { } Thickness { } Mean pitch of stay tubes in nests

If comprising shell, Dia. as per rule { front... } Pitch in outer vertical rows { } Dia. of tube holes FRONT { stay... } BACK { stay... }

Is each alternate tube in outer vertical rows a stay tube Working pressure by rules { front... } back...

Girders to combustion chamber tops: Material Tensile strength

Depth and thickness of girder at centre Length as per rule

Distance apart No. and pitch of stays in each Working pressure by rule



Crown stays: Material _____ Tensile strength _____ Diameter { at body of stay, _____ or over threads. _____ }
 No. of threads per inch _____ Area supported by each stay _____ Working pressure by rules _____

Screw stays: Material _____ Tensile strength _____ Diameter { at turned off part, _____ or over threads. _____ } No. of threads per inch _____
 Area supported by each stay _____ Working pressure by rules _____ Are the stays drilled at the outer ends _____

Tubes: Material _____ External diameter { plain _____ stay _____ } Thickness { _____ }
 No. of threads per inch _____ Pitch of tubes _____ Working pressure by rules _____

Manhole Compensation: Size of opening in ^{END} shell plate "16" x 12" Section of compensating ring / No. of rivets and diameter of rivet holes ✓ Outer row rivet pitch at ends ✓ Depth of flange if manhole flanged 4"

Uptake: External diameter _____ Thickness of uptake plate _____

Cross Tubes: No. _____ External diameters { _____ } Thickness of plates _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with _____

The foregoing is a correct description,
 For HARLAND AND WOLFF, LIMITED.
 F. Stebbek
 Manufacturer.

Dates of Survey { During progress of work in shops - - } Aug. 2. 10. 12. 23 Sept 1 = 5 Is the approved plan of boiler forwarded herewith (If not state date of approval.)
 { During erection on board vessel - - } Total No. of visits _____

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

This Reservoir has been constructed under Special Survey. The materials & workmanship are sound & good. It has been satisfactorily tested by hydraulic pressure & is eligible, in my opinion, for installation on a classed vessel.

It is being forwarded to Glasgow.

This Reservoir has been properly fitted on board the vessel. Safety valves have been adjusted under air pressure to the working pressure of 356 lb./sq. in.

J. D. Boyle
 Glasgow, 29/12/27.

Survey Fee £ 4 : 4 : - } When applied for, 27th Sept 19 27
 Travelling Expenses (if any) £ : : } When received, 17th Oct 19 27

R. Lee Amess
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 10 JAN 1928
 Assigned See G.S. Rpt. No. 47434

