

REPORT ON AIR RESERVOIRS. BOILERS.

No. 51840
21 OCT 1931

Received at London Office

Writing Report 19th Oct. 1931 When handed in at Local Office 19th Oct. 1931 Port of Glasgow
 Survey held at Glasgow Date, First Survey 11 - 8 - 30 Last Survey 14th Oct. 1931
 on the T.S. M.V. "CLIONA" (Number of Visits 89) Gross 8375 Tons Net 4948
 Built at Glasgow By whom built Harland & Wolff Ltd. Yard No. 9086 When built 1931
Glasgow By whom made Ditto Engine No. 908 When made 1931
Belfast By whom made Harland & Wolff Ltd. Boiler No. 708 G. When made 1930
 Owners Anglo Saxon Petroleum Co. Ltd. Port belonging to London

AIR RESERVOIRS.

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

Manufacturers of Steel (Letter for Record
 Heating Surface of Boilers Is forced draught fitted Coal or Oil fired
 and Description of Boilers Four - Cylindrical - Built, Steel. Working Pressure
 tested by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately yes
 No. and Description of safety valves to each boiler pipe line 2 - Direct Spring
 No. of each set of valves per boiler Pressure to which they are adjusted 356 lb/in² 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 Length Shell plates: Material Tensile strength
 Are the shell plates welded or flanged Description of riveting: circ. seams end inter.
 Diameter of rivet holes in circ. seams Pitch of rivets long. seams
 Percentage of strength of circ. end seams plate rivets Percentage of strength of circ. intermediate seam plate rivets
 Percentage of strength of longitudinal joint plate rivets combined Working pressure of shell by Rules
 Thickness of butt straps outer inner
No. and Description of Furnaces in each Boiler
 Tensile strength Smallest outside diameter
 Thickness of plates crown bottom Description of longitudinal joint
 Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules
 Plates in steam space: Material Tensile strength Thickness Pitch of stays
 How are stays secured Working pressure by Rules
 Front plates: Material Tensile strength Thickness
 Pitch of stay tubes in nests Pitch across wide water spaces Working pressure front back
 Girders to combustion chamber tops: Material Tensile strength Depth and thickness of girder
 Length as per Rule Distance apart No. and pitch of stays
 Working pressure by Rules Combustion chamber plates: Material
 Tensile strength Thickness: Sides Back Top Bottom
 Are stays fitted with nuts or riveted over
 Working pressure by Rules Front plate at bottom: Material Tensile strength
 Thickness Lower back plate: Material Tensile strength Thickness
 Are stays fitted with nuts or riveted over
 Working Pressure Main stays: Material Tensile strength
 Diameter At body of stay, No. of threads per inch Area supported by each stay Over threads
 Working pressure by Rules Screw stays: Material Tensile strength
 Diameter At turned off part, No. of threads per inch Area supported by each stay Over threads

5b.

Working pressure by Rules _____ Are the stays drilled at the outer ends _____ Margin stays: Diameter { At turned off part, or Over threads } _____

No. of threads per inch _____ Area supported by each stay _____ Working pressure by Rules _____

Tubes: Material _____ External diameter { Plain _____ Stay _____ } Thickness { _____ } No. of threads per inch _____

Pitch of tubes _____ Working pressure by Rules _____ Manhole compensation: Size of opening _____

shell plate _____ Section of compensating ring _____ No. of rivets and diameter of rivet holes _____

Outer row rivet pitch at ends _____ 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 rivets _____

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 from the boiler _____

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 _____

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, _____
Manuf _____

Dates of Survey { During progress of work in shops - - } _____ Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) _____

while building { During erection on board vessel - - - } _____

SEE ACCOMPANYING MACHINERY REPORT.

Total No. of visits 89

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These Air Receivers have been properly fitted in the vessel and the safety valves adjusted above. Fusible plugs are fitted in each Receiver.*

Boyle
19/10/31

Survey Fee £ : : When applied for, 19

Travelling Expenses (if any) £ : : When received, 19

J. D. Boyle
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **GLASGOW 20 OCT 1931**

Assigned **SEE ACCOMPANYING MACHINERY REPORT.**

