

# REPORT ON BOILERS.

125362

No.

10 JUN 1953

Received at London Office

Date of writing Report 30<sup>th</sup> Aug. 1952 When handed in at Local Office 5/9/52 Port of London

No. in Reg. Book. Survey held at London Date, First Survey 19.6.52. Last Survey 29.8.1952

on the SS. "BLANDFORD" (Number of Visits 5) Tons Gross Net

Built at By whom built H & W Yard No. 1454 When built

Engines made at By whom made Engine No. When made

Boilers made at London By whom made Messrs. Towler & Sons Ltd. Boiler No. J. 740 When made 1952

Owners Port belonging to

## VERTICAL BOILER.

Made at London By whom made Messrs. Towler & Sons Boiler No. J. 740 When made 1952 Where fixed

Manufacturers of Steel Messrs. Babcock & Wilcox Ltd. (Shell) Messrs. Appleby Frodingham Steel Co. (Tube plates)

Total Heating Surface of Boiler 1575 sq. feet. Is forced draught fitted  Coal or Oil fired Exhaust gas

No. and Description of Boilers One Hammer "Swirlflo" Exhaust gas Multitubular Working Pressure 180 p.s.i.

Tested by hydraulic pressure to 320 p.s.i. Date of test 29<sup>th</sup> August 1952 No. of Certificate 1467

Area of fire grate in each Boiler No. and description of safety valves to each boiler One 2" DIA. C.S. Imp. H.L. Double spring

Area of each set of valves per boiler { per Rule Pressure to which they are adjusted 185 lbs/sq. in. Are they fitted with easing gear yes.

State whether steam from main boilers can enter the donkey boiler No. 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 yes. Largest internal dia. of boiler 6'-3" Height 8'-0"

Shell plates: Material Open Hearth Tensile strength 28/32 tons/sq. in. Thickness 5/8"

Are the shell plates welded or flanged Welded If fusion welded, state name of welding firm Messrs. Henry Balfour, Seven.

Have all the requirements of the Rules for Class I vessels been complied with yes. Description of riveting: circ. seams { end. inter. }

long. seams Dia. of rivet holes in { circ. seams Pitch of rivets Percentage of strength of circ. seams { plate rivets }

of longitudinal joint { plate rivets combined Thickness of butt straps { outer inner Shell Crown: Whether complete hemisphere, dished partial

spherical, or flat Material Tensile strength Thickness

Radius Description of Furnace: Plain, spherical, or dished crown Material

Tensile strength Thickness External diameter { top bottom Length as per Rule

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

Thickness of Ogee Ring Diameter as per Rule { D d }

Combustion Chamber: Material Tensile strength Thickness of top plate

Radius if dished 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

Tube Plates: Material { front M.S. back N.S. Tensile strength Thickness Mean pitch of stay tubes in nests

If comprising shell, dia. as per Rule { front back Pitch in outer vertical rows Dia. of tube holes { stay plain }

Is each alternate tube in outer vertical rows a stay tube No.

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



Crown Stays: Material ..... Tensile strength ..... Diameter { at body of stay, or over threads. ....

No. of threads per inch ..... Screw Stays: Material ..... Tensile strength .....

Diameter { at turned off part, or over threads. .... No. of threads per inch ..... Are the stays drilled at the outer ends. ....

Tubes: Material *Open Hearth Steel* ✓ External diameter { plain *2 1/4"* ✓ stay *2 1/2"* ✓ Thickness { *8. s.w. g.* ✓ *3/8"* ✓

No. of threads per inch ..... Pitch of tubes .....  
 Manhole Compensation: Size of opening in shell plate. *16" x 12"* Section of compensating ring. *12" x 5/8"* No. of rivets and diameter of rivet holes. ✓ Outer row rivet pitch at ends. ✓ Depth of flange if manhole flanged. ✓

Uptake: External diameter ..... Thickness of uptake plate. ✓

Cross Tubes: No. ✓ External diameters { Thickness of plates. ✓

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with.

The foregoing is a correct description,  
**P.P. TOWLER & SON LTD.**  
*E. G. Campbell* Manufacturer.  
 TECHNICAL MANAGER

Dates of Survey while building { During progress of work in shops - - } *19.6.52, 21.7.52, 22.8.52, 29.8.52* Is the approved plan of boiler forwarded herewith (If not state date of approval.) No. *1585*  
 { During erection on board vessel - - - } *5* Total No. of visits.

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.) *This Boiler has been built from tested material and surveyed during construction in compliance with the Society's rules and according to the appointed plan No. 4435*  
*The workmanship is of good average standard and the boiler is eligible in my opinion to be installed and used in a classed vessel.*  
*This boiler has now been installed in the vessel examined under working conditions & found satisfactory Safety Valves have been adjusted to 185 lbs.*

Survey Fee ... *Lon. £24:0:0* } When applied for *5/9/1952*  
 Travelling Expenses (if any) £ *4:0:0* } When received *19*  
*(Std. Cert. C3374)*

*A. Williams*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Date **GLASGOW 9 JUN 1953**  
 Committee's Minute **SEE ACCOMPANYING MACHINERY REPORT**



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