

# REPORT ON BOILERS.

Sld. No. 32996  
Gls. No. 6221

Date of writing Report 9-4-40 Received at London Office APR 10 1940  
 When handed in at Local Office 9-4-40 Port of Glasgow  
 No. in Survey held at Annan Date, First Survey 1939 Dec 28 Last Survey 4-4-1940  
 Reg. Book. on the M/V "FULTALA" (Number of Visits 13) Tons {Gross 5051  
 Built at Sunderland By whom built Wm. Dorrance & Sons Ltd Yard No. 664 When built 1940  
 Boilers made at Annan By whom made Bochran & Co Annan Ltd Boiler No. 14518 When made 1940  
 Owners British India Steam Navigation Co Ltd Port belonging to London

**VERTICAL DONKEY BOILER**— No. one Description Bochran Compoits Manufacturers of steel Bochran & Co Ltd  
 Made at as above By whom made - When made - Where fixed Upper boiler Working pressure 120 lbs  
 Tested by hydraulic pressure to 230 Date of test 4-4-40 No. of Certificate 20545 Fire grate area - Description of safety valves Enclosed spring  
 No. of safety valves 2 Area of each 7.06 sq" Pressure to which they are adjusted 120 If fitted with easing gear yes If steam from main boilers can  
 enter the donkey boiler - Diameter of donkey boiler 8'-0" Length 14'-9" Material of shell plates S Thickness 13/16" 21/32"  
 Range of tensile strength 28-32 tons Description of riveting long seams DIP lap Diameter of rivet holes 1/32" Whether punched or  
 drilled drilled Pitch of rivets 3.15" 3.13" 3.18" Lap of plating 5" Per centage of strength of joint - Rivets 66.2 53.9 Working pressure of shell by  
 plates 66.8 67.3 Thickness of shell crown plates 19/32" 1/32" Radius of do. 4'-0" No. of stays to do. - Diameter of stays - Diameter of  
 furnace—Top - Bottom 7'-0" Length of furnace - Thickness of furnace side plates 23/32" Description of joint Seamless Working  
 pressure of furnace by rules 144 Thickness of Ogee ring 1/32" Working pressure of Ogee ring by rules 124 Thickness of furnace  
 crown plates 23/32" Radius of do. 3'-6" Stayed by Hemisphere Diameter of uptake 21 1/2" x 25" Thickness of uptake  
 plates 9/16" Thickness of tube plates front 1/4" back 1/4" Mean pitch of stay tubes in nest 8.18" 8.36" 9.44" Pitch in outer vertical rows 5 1/4" 6.37"  
 Diameter of tube holes FRONT stay 2 1/16" plain 2 1/16" BACK stay 2" 1/2" plain 2" 1/2" Working pressure of tube plates by rules 8-196 161 Tubes: Material S  
 External diameter stay 2" 1/2" plain 2" 1/2" Thickness stay 11/32" plain 10/32" No. of threads per inch 9 Pitch of tubes 2 5/8" x 2 1/2" 3.13" x 3.18"  
 Working pressure by rules 215 Manhole compensation: Size of opening in shell plate 21" x 17" Section of compensating  
 ring 9 1/4" x 1 1/2" No. of rivets and diameter of rivet holes 40 @ 1/32" Outer row pitch at ends 4.03"

The foregoing is a correct description,  
 Signed W. G. Fraser Manufacturer

Dates {During progress of work in shops - } 1939 Dec. 28 1940 Jan. 18, 25, Drawing No. 25190  
 {Survey while on board vessel - } Feb. 2, 9, 16, 20, 28, Mar. 8, 14, 21, 29 Apr. 4.  
 Total No. of visits 13 Is the approved plan of boiler forwarded herewith yes

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

The materials and workmanship are good.  
 The boiler has been constructed under special survey. It will be sent to  
 Pallion yard Sunderland to be fitted in the vessel.

Heating surface - Exhaust gas - 515 sq. ft. Oil fired - 538 sq. ft.

This boiler has been securely fixed on board the vessel  
 examined under steam & safety valves adjusted to working pressure  
 For recommendation please see Memo Rpt.  
 W. G. Fraser.

Survey Fee ... £ 5 : 12 : } When applied for ... 19...  
 Travelling Expenses (if any) £ : : } When received ... 19...

Committee's Minute **GLASGOW** 9 APR 1940  
 Assigned **TRANSMIT TO LONDON**

W. G. Fraser  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 Lloyd's Register Foundation  
 1639-0210