

# REPORT ON BOILERS.

No. 9188

10 SEP 1924

Received at London Office

Date of writing Report 9/9/1924 When handed in at Local Office 9/9/1924 Port of Belfast  
 No. in Survey held at Belfast Date, First Survey 14<sup>th</sup> April 1924 Last Survey 29<sup>th</sup> August 1924  
 Reg. Book. Donkey Boiler for the M.S. "COMLIEBANK" (Number of Visits 15) Gross Tons 663 9/16 Net Tons 663 9/16  
 Master Glasgow Built at Glasgow By whom built Harland & Wolff Ltd When built 1924  
 Engines made at Glasgow By whom made Harland & Wolff Ltd When made 1924  
 Donkey Boilers made at Belfast By whom made Harland & Wolff Ltd When made 1924  
 Registered Horse Power \_\_\_\_\_ Owners Messrs Wm & A. Watson & Co (Bankers) Belfast belonging to \_\_\_\_\_

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ DONKEY. — Manufacturers of Steel D. Colville & Sons.

(Letter for record 5) Total Heating Surface of Boilers 1510 sq ft Is forced draft fitted No No. and Description of Boilers One single ended. Working Pressure 110 lbs Tested by hydraulic pressure to 215 lbs Date of test 29.8.24  
 No. of Certificate 845 Can each boiler be worked separately Yes Area of fire grate in each boiler 114 sq ft No. and Description of safety valves to each boiler TWO SPRING LOADED Area of each valve 9.62 sq in Pressure to which they are adjusted 112 lbs/sq in  
 Are they fitted with easing gear YES In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No  
 Smallest distance between boilers or uptakes and bunkers or ~~woodwork~~ 2'-1" <sup>BULKHEAD</sup> INSIDE Mean dia. of boilers 13'-0" Length 11'-0"  
 Material of shell plates Steel Thickness 3/4" Range of tensile strength 45,000 lbs/sq in Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams D.R. long. seams T.R.D.P.S. Diameter of rivet holes in long. seams 15/16" Pitch of rivets 6'8"  
 Top of plates or width of butt straps 1'-2" Per centages of strength of longitudinal joint 84.5 Working pressure of shell by rules 120 lbs Size of manhole in shell 16" x 12" Size of compensating ring 20'3" x 2'8" oval No. and Description of Furnaces in each boiler 3 Corrugated Material Steel Outside diameter 3'-4 1/8" Length of plain part 3'-0" Thickness of plates 3/4" crown 4" bottom 16"  
 Description of longitudinal joint weld No. of strengthening rings 1 Working pressure of furnace by the rules 156 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 3/4" Pitch of stays to ditto: Sides 8 1/4" x 8 1/2" Back 9 x 8 1/2"  
 Top 9 1/2" x 8 1/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 154 lbs Material of stays Steel Area at smallest part 1.22 sq in Area supported by each stay 46.5 sq in Working pressure by rules 143 lbs End plates in steam space: Material Steel Thickness 1/4"  
 Pitch of stays 18 x 18 How are stays secured Nuts & Washers Working pressure by rules 130 lbs Material of stays Steel Area at smallest part 4.118 sq in  
 Area supported by each stay 324 sq in Working pressure by rules 140 lbs Material of Front plates at bottom Steel Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest nitch of stays 12 3/4" x 8 1/2" Working pressure of plate by rules 193 lbs Diameter of tubes 3 1/4"  
 Pitch of tubes 4'2" x 4'2" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 8.92 Pitch across wide water spaces 1'-2" Working pressures by rules 130 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 20" x 3 1/4" Length as per rule 2'-6" Distance apart 9 1/2" Number and pitch of Stays in each 3 @ 8 1/4"  
 Working pressure by rules 141 lbs Steam dome: description of joint to shell hone % of strength of joint \_\_\_\_\_  
 Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_  
 Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_

SUPERHEATER. Type none Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_  
 Date of Test \_\_\_\_\_ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler \_\_\_\_\_  
 Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

The foregoing is a correct description, FOR HARLAND AND WOLFE, LIMITED. J. D. Neay Manufacturer.

Dates of Survey: During progress of work in shops - Apr 14, 18, May 1, June 3, 4, 10, 16, 24, 30, July 9, 10, 23 Is the approved plan of boiler forwarded herewith No will be forwarded with lot 9.  
 while building: During erection on board vessel - Aug 13, 20, 29 = 15 Total No. of visits \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey. Materials & workmanship good. Hydraulic tests satisfactory. It is being shipped to Glasgow for installation in the vessel.  
This boiler has now been fitted on board the above vessel in an efficient manner, examined under steam and everything found satisfactory. Safety valves adjusted to 112 lbs/sq in Washer A 1/16" F 7/16

Survey Fee ... £ 10 2 0 When applied for, 8/9/1924  
 Travelling Expenses (if any) £ \_\_\_\_\_ When received, 29/10/1924  
Wm & A. Watson & Co William D. Neay A. McConick  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute \_\_\_\_\_  
 Assigned See G.L. Rpt. No. 44226  
 GLASGOW 9-DEC-1924

