

Continuation

pt. 5a.

REPORT ON BOILERS.

No. 3952H.

Received at London Office

Date of writing Report 191 When handed in at Local Office 191 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 20/6/18 Last Survey 6/1/19
 Reg. Book. on the Donkey Boiler SS. BALFE (Number of Visits 51) Gross Tons }
 Net Tons }
 Master Do & W Henderson & Co Ltd Built at Glasgow By whom built Do & W Henderson & Co Ltd When built 1919
 Engines made at Glasgow By whom made Do & W Henderson & Co Ltd When made 1919
 Boilers made at Do By whom made Do When made 1919
 Registered Horse Power _____ Owners Lampson & Holt Port belonging to Liverpool

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR DONKEY.~~ — Manufacturers of Steel McAlpine & Co Ltd
 Letter for record (S) Total Heating Surface of Boilers 1372 Is forced draft fitted No No. and Description of Boilers one single ended
 Working Pressure 150 lb Tested by hydraulic pressure to 230 lb Date of test 15.11.19
 No. of Certificate 14990 Can each boiler be worked separately — Area of fire grate in each boiler 37.5 No. and Description of Safety valves to each boiler 2 spring loaded Area of each valve 5.930 Pressure to which they are adjusted 120 lb
 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 1-6 Inside Mean dia. of boilers 12.6 Length 10.6 13/16
 Material of shell plates Steel Thickness 3/4 Range of tensile strength 28632 tons Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams do lap long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 7/8 Pitch of rivets 5 1/2
 Lap of plates or width of butt straps 13 3/4 Per centages of strength of longitudinal joint rivets 8668 Working pressure of shell by plate 84.09
 Rules 124 Size of manhole in shell 16x12 Size of compensating ring 2-7x2-2x1 1/4 No. and Description of Furnaces in each boiler 2 corrugated
 Material Steel Outside diameter 49 1/8 Length of plain part top — bottom — Thickness of plates top — bottom 7/8
 Description of longitudinal joint weld No. of strengthening rings — Working pressure of furnace by the rules 128 Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 9/16 Pitch of stays to ditto: Sides 9x8 Back 9x8
 Top 9x9 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 131 Material of stays Steel Area Diameter at smallest part 1.48 Area supported by each stay 830 Working pressure by rules 142 End plates in steam space: Material Steel Thickness 1 1/2
 Pitch of stays 18x18 How are stays secured do nuts Working pressure by rules 123 Material of stays Steel Area Diameter at smallest part 3.850
 Area supported by each stay 3240 Working pressure by rules 123 Material of Front plates at bottom Steel Thickness 1 1/2 Material of lower back plate Steel Thickness 1 1/2 Greatest pitch of stays 14x8 Working pressure of plate by rules 146 Diameter of tubes 3 1/4
 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates Steel Thickness: Front 13/16 Back 1 1/16 Mean pitch of stays 10.5 Pitch across wide water spaces 14 Working pressures by rules 183 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 3/4 x 11 (2) Length as per rule 30.8 Distance apart 9 1/4 Number and pitch of Stays in each (2) 9
 Working pressure by rules 121 Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately _____ Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet _____ Pitch of rivets _____ Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____ stiffened with rings _____ Distance between rings _____ Working pressure by rules _____ End plates: Thickness _____ How stayed _____ Working pressure of end plates _____ Area of safety valves to superheater _____ Are they fitted with easing gear _____

The foregoing is a correct description,

FOR DAVID & WALTER HENDERSON & CO., LTD.
A. J. Pattie

Manufacturer.

Dates } During progress of } See accompanying Is the approved plan of boiler forwarded herewith Yes
 Survey } work in shops - - - } Machinery Reports. Total No. of visits _____
 while } During erection on } _____
 building } board vessel - - - }

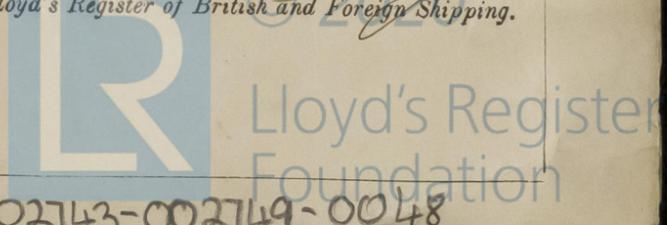
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under Special Survey materials and workmanship are good and it has been satisfactorily fitted to the vessel.

Survey Fee ... £ : : When applied for, 191
 Travelling Expenses (if any) £ : : When received, 191

Jas Dastute Mc Murray
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW 13 JAN 1920

Assigned See attached machinery report



002743-002749-0048