

REPORT ON BOILERS.

No. 28698

Received at London Office **THUR. 31 MAR 1910**
 25 MAR 1910
 Safety Certificate of Registering Report When handed in at Local Office Port of Glasgow.
 No. in Survey held at Glasgow. Date, First Survey 24th Dec. 1909 Last Survey 16th March 1910
 Reg. Book. on the Steel Steam Tug "The Forester" (Number of Visits 10) Gross 190.78 Tons Net 78.89
 Master Built at Chepstow By whom built Edward Finch & Co. (No. 267) When built 1910
 Engines made at Gloucester By whom made W. Sisson & Co. (No. 923) when made 1910
 Boilers made at Glasgow By whom made Lindsay Burnet & Co. (No. 1258) when made 1910.
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Stewarts & Lloyd & Lanarkshire

Letter for record (2) Total Heating Surface of Boilers 904 sq ft Is forced draft fitted No. and Description of Boilers 1 single ended marine type. Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbs Date of test 16.3.10.
 No. of Certificate 10321 Can each boiler be worked separately Area of fire grate in each boiler 233 sq ft No. and Description of Safety valves to each boiler Two, Spring Area of each valve 3-1/4 Pressure to which they are adjusted 125 lbs
 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 20" Inside diam. of boilers 10-1/2" Length 9'-0"
 Material of shell plates Steel Thickness 21/32" Range of tensile strength 28/32 tons Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams D.R. Lap long. seams D.R.R.S. Diameter of rivet holes in long. seams 7/8" Pitch of rivets 4 21/32"
 Width of butt straps 9 1/4" Per centages of strength of longitudinal joint plate rivets 87.8% Working pressure of shell by plate 81.2%
 Size of manhole in shell 16" x 12" Size of compensating ring 4 1/2" x 1" flanged No. and Description of Furnaces in each boiler 2 plain Material Steel Outside diameter 3'-2" Length of plain part top 6'-2" Thickness of plates crown 7/8" bottom 7/8"
 Description of longitudinal joint welded No. of strengthening rings one Working pressure of furnace by the rules 149 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 5/8" Top 5/8" Bottom 9/16" Pitch of stays to ditto: Sides 9 x 8" Back 9 1/2 x 8 1/4" area
 If stays are fitted with nuts or riveted heads Palm stays riveted + others Working pressure by rules 171 lbs Material of stays Steel Thickness at smallest part 1-19" Area supported by each stay 78.5 sq in Working pressure by rules 121 lbs End plates in steam space: Material Steel Thickness N
 How are stays secured on nuts Working pressure by rules 120 lbs Material of stays Steel Diameter at smallest part 3.85" area
 Area supported by each stay 335 sq in Working pressure by rules 120 lbs Material of Front plates at bottom Steel Thickness 23/32" Material of lower back plate Steel Thickness 1/16" Greatest pitch of stays 14" Working pressure of plate by rules 176 lbs Diameter of tubes 3 1/4"
 Pitch of tubes 4 1/2" x 4 3/8" Material of tube plates Steel Thickness: Front 23/32" Back 1/16" Mean pitch of stays 11 1/8" Pitch across wide water spaces 14" Working pressures by rules 183 lbs. Girders to Chamber tops: Material none. Depth and thickness of order at centre Length as per rule Distance apart 7 5/8" centres of Palm stays Number and pitch of Stays in each
 Working pressure by rules Superheater or Steam chest; how connected to boiler 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,
Lindsay Burnet & Co Manufacturer.

Survey request form No. 318 attached
 Dates During progress of work in shops: 1909. Dec 24. 1910. Jan 22. 24. Feb 1. Is the approved plan of boiler forwarded herewith yes.
 While building: 9. 15. 28. Mar 3. 10. 16. Total No. of visits 10
 During erection on board vessel: 1910 Sept 1 - 9. 21

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The workmanship + materials are good. the boiler has been built under Special Survey, + is being forwarded to Chepstow.

Survey Fee ... £ 3 : 0 : When applied for. 29/31. 19. 10.
 Travelling Expenses (if any) £ : : When received. 2/4/ 19. 10.
A.H. Hilditch.
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW 30 MAR. 1910
 Assigned Transmit to London.
 THE 10 OCT 1910
 FRI. 24 MAR 1911
 Lloyd's Register Foundation
 W578 0019