

REPORT ON BOILERS.

No. 36641
WED. - 7 FEB. 1917

Received at London Office

Site of writing Report 4 - 1 - 1916 When handed in at Local Office 1917 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 19th Jan. 1915 Last Survey 25 - 1 - 1917
 Reg. Book. 81's 'Feruleaf' (Number of Visits) Tons { Gross / Net

Master Built at Glasgow By whom built Harpur, Miller & Co (200) When built 1917
 Engines made at Glasgow By whom made Dunsmuir, Jackson & Co (454) When made 1917
 Boilers made at ditto By whom made ditto When made 1917
 Registered Horse Power Owners ? Port belonging to

MULTITUBULAR BOILERS ~~...~~ **DONKEY.** - Manufacturers of Steel Edg. & Steel Co. & Cochrane & Dunlop

Letter for record S Total Heating Surface of Boilers 12627 Is forced draft fitted no No. and Description of Boilers one single ended Working Pressure 120 Tested by hydraulic pressure to 240 Date of test 26.4.16

No. of Certificate 13404 Can each boiler be worked separately ✓ Area of fire grate in each boiler 61.5 No. and Description of Safety valves to each boiler Double Spring Area of each valve 5.93 Pressure to which they are adjusted 125

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 6-3" Mean dia. of boilers 12-0 13/16" Length 10-6"

Material of shell plates S Thickness 13/16" Range of tensile strength 28/32 Are the shell plates welded or flanged ✓

Description of riveting: cir. seams DR long. seams 9R. 10R Diameter of rivet holes in long. seams 1/8" Pitch of rivets 5 1/8"

Lap of plates or width of butt straps 10 1/2" Per centages of strength of longitudinal joint plate 78.04 Working pressure of shell by rules 142 No. and Description of Furnaces in each boiler 2 Main Material S Outside diameter 3.49 1/16" Length of plain part 6-4 7/16" Thickness of plates 5 1/8"

Description of longitudinal joint weld No. of strengthening rings ✓ Working pressure of furnace by the rules 122 Combustion chamber plates: Material S Thickness: Sides 9/16" Back 9/32" Top 9/16" Bottom 23/32" Pitch of stays to ditto: Sides 8 1/4 x 9 3/4" Back 10 x 9 1/2"

Top 8 1/2 x 9 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 128 Material of stays S Diameter at smallest part 1.476 1/98 Area supported by each stay 95 Working pressure by rules 140 End plates in steam space: Material S Thickness 29/32"

Pitch of stays 18+16 How are stays secured DN Working pressure by rules 128 Material of stays S Diameter at smallest part 3.437

Area supported by each stay 988 Working pressure by rules 123 Material of Front plates at bottom S Thickness 13/16" Material of Lower back plate S Thickness 23/32" Greatest pitch of stays 14 1/4 x 9 1/2" Working pressure of plate by rules 129 Diameter of tubes 3

Pitch of tubes 4 1/4 + 4 1/4" Material of tube plates S Thickness: Front 13/16" Back 23/32" Mean pitch of stays 10.62 Pitch across wide water spaces 14" Working pressures by rules 121 Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 8+7/8 (2) Length as per rule 2-10 1/2" Distance apart 9 1/4" Number and pitch of Stays in each 3 at 8 1/2"

Working pressure by rules 148 Superheater or Steam chest: how connected to boiler ✓ Can the superheater be shut off and the boiler worked separately ✓

holes Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet If 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

DUNSMUIR & JACKSON, Limited.
 (The foregoing is a correct description,
James Fletcher Director Manufacturer.

Dates of Survey: During progress of work in shops - - - See attached machinery report Is the approved plan of boiler forwarded herewith yes
 while building: During erection on board vessel - - - Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey in accordance with the approved plan & the workmanship & material are of good quality.

This Report accompanies list of the Machinery

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

Charged on Machinery Report

Committee's Minute GLASGOW 6 - FEB. 1917
 Assigned See accompanying machinery report.

W. Gordon-Mitchell
 Engineer-Surveyor to Lloyd's Register of Shipping.

FRI. SEP. - 7 1917.
 FRI. NOV 9 1917.
 TUE. 9 - APR. 1918.
 FRI. JUL. 1918.

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