

REPORT ON BOILERS.

No. 39979.

Received at London Office WED. MAY. 13 1920

Date of writing Report 191 When handed in at Local Office 17.5.1920. Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 21. 1. 20. Last Survey 12/5/1920

Reg. Book. on the Boilers nos "B124" S/s. "Haleyon" (Number of Visits 15) Gross 1566 Tons Net 929

Master Built at Troon By whom built Ailsa S.B.C. When built 1921

Engines made at Troon By whom made Ailsa S.B.C. Engrs No 105 When made 1921

Boilers made at Glasgow By whom made Dunsmuir & Jackson When made 1920

Registered Horse Power 292 Owners General Steam Navigation Co. Ltd. Port belonging to London

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~—Manufacturers of Steel *Regd. No. 186* *James & Sons, 8, Colville Row*(Letter for record S.) Total Heating Surface of Boilers 5154 $\frac{1}{2}$ Is forced draft fitted No. and Description of

Boilers Two single-ended multitubular Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 12/5/20

No. of Certificate 15285 Can each boiler be worked separately Area of fire grate in each boiler 83 $\frac{1}{2}$ $\frac{1}{2}$ No. and Description of

safety valves to each boiler Area of each valve Pressure to which they are adjusted

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 *INT* dia. of boilers 16'-11" Length 11'-6"Material of shell plates S Thickness 1 $\frac{1}{32}$ Range of tensile strength 28/32 Are the shell plates welded or flanged NoDescrip. of riveting: cir. seams L. D. R. long. seams T. R. *Hot Staps* Diameter of rivet holes in long. seams 1 $\frac{3}{8}$ " Pitch of rivets 9 $\frac{9}{16}$ "Length of butt straps 20 $\frac{1}{2}$ " Per centages of strength of longitudinal joint rivets 85.75 plate 85.5 Working pressure of shell byrules 182 lbs Size of manhole in shell 16x12" Size of compensating ring 31 $\frac{1}{4}$ x 31 x 15 $\frac{1}{16}$ No. and Description of Furnaces in eachboiler 4 Corrugated Material S Outside diameter 49" Length of plain part top Thickness of plates crown 1 $\frac{7}{32}$ bottom 1 $\frac{3}{32}$

Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 185 Combustion chamber

plates: Material S Thickness: Sides 1 $\frac{1}{16}$ " Back 1 $\frac{1}{16}$ " Top 1 $\frac{1}{16}$ " Bottom 7 $\frac{7}{8}$ " Pitch of stays to ditto: Sides 9 $\frac{1}{2}$ x 9 $\frac{1}{2}$ Back 9 $\frac{7}{8}$ x 9"Top 9 $\frac{1}{2}$ x 9 $\frac{1}{2}$ If stays are fitted with nuts or riveted heads nuts Working pressure by rules 181 Material of stays S *area* Diameter atsmallest part 2 $\frac{1}{8}$ " Area supported by each stay 90 $\frac{25}{16}$ Working pressure by rules 201 End plates in steam space: Material S Thickness 1 $\frac{3}{16}$ "Pitch of stays 20 x 1 $\frac{1}{2}$ " How are stays secured D. nuts Working pressure by rules 190 Material of stays S Diameter at smallest part 5 $\frac{7}{8}$ "Area supported by each stay 330 $\frac{1}{4}$ " Working pressure by rules 182 Material of Front plates at bottom S Thickness 1 $\frac{1}{32}$ Material ofLower back plate S Thickness 29 $\frac{32}{32}$ Greatest pitch of stays 14 $\frac{3}{4}$ x 9" Working pressure of plate by rules 210 Diameter of tubes 3 $\frac{1}{2}$ "Pitch of tubes 4 $\frac{1}{16}$ x 4 $\frac{1}{16}$ " Material of tube plates S Thickness: Front 1 $\frac{1}{32}$ " Back 7 $\frac{7}{8}$ " Mean pitch of stays 13 $\frac{3}{4}$ " Pitch across widewater spaces 14 $\frac{1}{2}$ " Working pressures by rules 182 Girders to Chamber tops: Material S Depth and thickness ofgirder at centre 11 x 2" Length as per rule 40 $\frac{7}{16}$ " Distance apart 9 $\frac{1}{2}$ " Number and pitch of Stays in each 3 @ 9 $\frac{1}{2}$ "

Working pressure by rules 187 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

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

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 Are they fitted with easing gear

The foregoing is a correct description,

DUNSMUIR & JACKSON, Limited.

Manufacturer.

Dates of Survey During progress of 1920 Jan 21. 28. 30 Feb 12. 20. 26. Mar 2. 9. 17. 23 Is the approved plan of boiler forwarded herewith No

while building (During erection on board vessel - - -) Apr 14. 20. 29 May 3. 12. Total No. of visits 15

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

These boilers have been built under Special Survey and in accordance with the Rules: the materials and workmanship are sound & good, on completion they were tested by water pressure to 360 lbs per square inch and found tight and satisfactory in all respects.

Survey Fee ... £ 12 : 8 :

When applied for, 18.5.1920

Travelling Expenses (if any) £ :

When received, 20/5/1920

Committee's Minute

GLASGOW 18 MAY 1920

Assigned

TRANSMIT TO LONDON

Engineer Surveyor to Lloyd's Register of Shipping.

GLASGOW 18 OCT 1921

See attached Mach. Rpt. 41409.

003742-003749-0169