

REPORT ON BOILERS.

No. 40491

MON 13 JUN. 1921

Received at London Office

Date of writing Report 18. 10. 1920 When handed in at Local Office 18. 10. 1920 Port of Glasgow

No. in Reg. Book. on the S. S. "Brunton" Date, First Survey 17. 5. 1920 Last Survey 28. 9. 1920

Master James M. W. ab. Built at Leith By whom built Cran & Somerville When built 1921

Engines made at Leith By whom made Cran & Somerville (No. 236) When made 1921

Boilers made at Renfrew By whom made Tom Simons & Co (647 D.) When made 1920

Registered Horse Power Owners Messrs G. Y. Gillie & Co. Port belonging to Newcastle

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

(Letter for record (S) Total Heating Surface of Boilers 1168 sq ft Is forced draft fitted

Boilers 1 Single ended Working Pressure 130 Tested by hydraulic pressure to 260 Date of test 28/9/20

No. of Certificate 15578 Can each boiler be worked separately Area of fire grate in each boiler 44 sq ft

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 Mean dia. of boilers 12.0 Length 10' 0"

Material of shell plates Steel Thickness 3/4 Range of tensile strength 25 to 32 Are the shell plates welded or flanged 220

Descrip. of riveting: cir. seams Double Lap long, seams Triple butt Diameter of rivet holes in long, seams 13/16 Pitch of rivets 5/8

Lap of plates or width of butt straps 12 1/2 Per centages of strength of longitudinal joint rivets 86.0 Working pressure of shell by plate 86.0

rules 132 Size of manhole in shell 16 x 12 Size of compensating ring 28 x 24 x 1 No. and Description of Furnaces in each boiler 2 plain

Description of longitudinal joint Weld No. of strengthening rings 1 per part Working pressure of furnace by the rules 139 Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 1/16 Pitch of stays to ditto: Sides 9" x 9" Back 9" x 9"

Top 9" x 9" If stays are fitted with nuts or riveted heads Working pressure by rules 135 Material of stays Steel Area at smallest part 1.45

Area supported by each stay 21 Working pressure by rules 143 End plates in steam space: Material Steel Thickness 19/16

Pitch of stays 17 x 16 1/2 How are stays secured 2 nuts Working pressure by rules 139 Material of stays Steel Area at smallest part 4.11

Area supported by each stay 284 Working pressure by rules 130 Material of Front plates at bottom Steel Thickness 1/16 Material of Lower back plate Steel Thickness 1/16

Greatest pitch of stays 13 Working pressure of plate by rules 131 Diameter of tubes 3 1/2 Pitch of tubes 4 1/2 x 4 3/8 Material of tube plates Steel Thickness: Front 1/16 Back 1/16 Mean pitch of stays 9.9 Pitch across wide water spaces 14 1/2 with double Working pressures by rules 164

Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7 x 1/16 double length as per rule 28 3/4 Distance apart 9 Number and pitch of Stays in each (2) 9

Working pressure by rules 140 Steam dome: description of joint to shell none % 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

UPERHEATER. Type 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, J. M. Somerville Manufacturer.

Dates of Survey During progress of work in shops 1920 May 17 Jun 3. 16. 28 Aug 5. 19 Sep 28 Is the approved plan of boiler forwarded herewith See 647 A

while building During erection on board vessel See Rpt. 4. Total No. of visits 7

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

This boiler has been built under special survey, the materials and workmanship are of good description. It has now been forwarded to Leith where it will be fitted on board the vessel. This boiler has now been securely fitted on board the vessel, safety valves and mountings examined and found good.

Shipping. Survey Fee ... £ 3 : 18 : } When applied for, 19. Travelling Expenses (if any) £ : : } When received, 29 Oct 1920

A. M. Keane & Co. Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 19 OCT 1920 FRI. 17 JUN. 1921

Assigned TRANSMIT TO LONDON