

REPORT ON BOILERS.

No. 40489

Received at London Office

Date of writing Report 18. 10. 1920 When handed in at Local Office 18. 10. 1920 Port of Glasgow WED. OCT. 20 1920

No. in Survey held at Penrith Date, First Survey 17. 5. 1920 Last Survey 4. 10. 1920

Reg. Book. on the S. S. Graymount (Number of Visits 8) Gross Tons } Net

Master Built at Luth By whom built Cran & Son When built

Engines made at Luth By whom made Cran & Son (No 338) When made 1921

Boilers made at Penrith By whom made Wm Simons & Co Ltd (647 B) When made 1920

Registered Horse Power Owners Samuel Gray Port belonging to Belfast

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

(Letter for record (S)) Total Heating Surface of Boilers 1168 ✓ Is forced draft fitted no No. and Description of

Boilers 1 Single ended Working Pressure 130 ✓ Tested by hydraulic pressure to 260 Date of test 4/10/20

No. of Certificate 15515 Can each boiler be worked separately ✓ Area of fire grate in each boiler 44 ✓ 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 _____ Mean dia. of boilers 12-0 Length 10-0

Material of shell plates Steel Thickness 3/4 ✓ Range of tensile strength 28 to 32 ✓ Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams double lap long. seams butt Diameter of rivet holes in long. seams 13/16 ✓ Pitch of rivets 5 3/8 ✓

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

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 ✓ Material steel ✓ Outside diameter 3-9 3/16 ✓ Length of plain part 6-2 ✓ Thickness of plates crown 31 ✓ bottom 32 ✓

Description of longitudinal joint welded No. of strengthening rings 1 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 nuts ✓ Working pressure by rules 135 Material of stays Steel Area at

smallest part 1.45 ✓ Area supported by each stay 81 ✓ Working pressure by rules 143 End plates in steam space: Material Steel Thickness 15/16 ✓

Pitch of stays 17 x 16 3/4 ✓ 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 137 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 3/8 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 12) 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 _____

SUPERHEATER. 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,
Wm. Simons & Co., Ltd. Manufacturer.

Dates of Survey: During progress of 1920 May 17 Jun 3, 16, 28 Aug 5, 18 Sep 28 Oct 4 Is the approved plan of boiler forwarded herewith See 647 A
while building: During erection on board vessel - - - Total No. of visits 8

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 Luth where it will be fitted on board the vessel.

Survey Fee ... £ 3 : 18 : 0 When applied for, 19 OCT 1920
Travelling Expenses (if any) £ : : When received, 29 Oct 1920 Lon.

Committee's Minute GLASGOW 19 OCT 1920 TUE. NOV. 11 1921
Assigned TRANSMIT TO LONDON

A. W. Keane 2020
Engineer Surveyor to Lloyd's Register of Shipping.
All Luth & Co. Lloyd's Register Foundation
W289-0153