

REPORT ON BOILERS.

No. 36611

Received at London Office **WED. 17 JAN. 1917**

Date of writing Report 1916 **When handed in at Local Office** 1916 **Port of** Glasgow

No. in Survey held at Glasgow **Date, First Survey** 1st August, 1916 **Last Survey** 27th Dec 1916

Reg. Book. on the Boilers No 694 for Home Service Log No 21 **(Number of Visits)** 19 **Gross Tons** **Net Tons**

Master **Built at** Dartmouth **By whom built** Philip & Son **When built**

Engines made at **By whom made** **When made**

Boilers made at Glasgow **By whom made** A. & W. Dalrymple **When made** 1916

Registered Horse Power **Owners** **Port belonging to**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Steel Co. of Scotland & G. Colville & Son Ltd*

(Letter for record) S **Total Heating Surface of Boilers** 1215 sq ft **Is forced draft fitted** **No. and Description of Boilers** One single ended **Working Pressure** 150 lb **Tested by hydraulic pressure to** 300 **Date of test** 27.12.16

No. of Certificate 13650 **Can each boiler be worked separately** **Area of fire grate in each boiler** 43 sq ft **No. and Description of safety valves to each boiler**

Are they fitted with casing 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** 11-6" **Length** 10-6"

Material of shell plates Steel **Thickness** 13/16" **Range of tensile strength** 28/32 **Are the shell plates welded or flanged** No

Descrip. of riveting: cir. seams DR **long. seams** TR DBS **Diameter of rivet holes in long. seams** 1" **Pitch of rivets** 7"

Lap of plates or width of butt straps 14 1/2" **Per centages of strength of longitudinal joint** **Working pressure of shell by rules** 150 lb **Size of manhole in shell** 16 x 12" **Size of compensating ring** 25 x 21 x 1" **No. and Description of Furnaces in each boiler** 2 Plain **Material** Steel **Outside diameter** 44 1/2" **Length of plain part** 78 3/4" **Thickness of plates** crown 3/4" bottom 3/4"

Description of longitudinal joint Welded **No. of strengthening rings** 1 **Working pressure of furnace by the rules** 164 lb **Combustion chamber plates: Material** Steel **Thickness: Sides** 9/16" **Back** 9/16" **Top** 9/16" **Bottom** 9/16" **Pitch of stays to ditto: Sides** 8 1/2 x 8" **Back** 8 x 8" **Top** 8 1/2 x 8" **If stays are fitted with nuts or riveted heads** Nuts **Working pressure by rules** 160 lb **Material of stays** Steel **Diameter at smallest part** 1.5" **Area supported by each stay** 66 sq in **Working pressure by rules** 199 lb **End plates in steam space: Material** Steel **Thickness** 7/8" **Pitch of stays** 16 x 14 1/2" **How are stays secured** D.V. W. **Working pressure by rules** 156 lb **Material of stays** Steel **Diameter at smallest part** 3/4" **Area supported by each stay** 232 sq in **Working pressure by rules** 154 lb **Material of Front plates at bottom** Steel **Thickness** 3/4" **Material of Lower back plate** Steel **Thickness** 3/4" **Greatest pitch of stays** 13 1/2" **Working pressure of plate by rules** 233 lb **Diameter of tubes** 3 1/2" **Pitch of tubes** 4 1/2 x 4 1/2" **Material of tube plates** Steel **Thickness: Front** 3/4" **Back** 7/8" **Mean pitch of stays** 9.84" **Pitch across wide water spaces** 15 1/2" **Working pressures by rules** 228 lb **Girders to Chamber tops: Material** Steel **Depth and thickness of girder at centre** 7 1/2 x 1.125" **Length as per rule** 27" **Distance apart** 8" **Number and pitch of Stays in each** Two 8 1/2" **Working pressure by rules** 164 lb

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 casing gear**

Survey request form: No. 1924 attached

The foregoing is a correct description, *A. & W. Dalrymple* Manufacturer's

Dates of Survey During progress of work in shops - 1916 Aug. 13, 29, Sept. 6, 13, 20, 25, Oct. 3, 10, 17, 24, 31, Nov. 7, 14, 21, 28, Dec. 5, 12, 19, 26

while building During erection on board vessel - 1916 Aug. 27

Is the approved plan of boiler forwarded herewith Yes

Total No. of visits 19

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The workmanship & materials are good, the boiler has been built under special survey

Boiler will be forwarded to Dartmouth. Duplicate of Boiler No 695.

Survey Fee ... £ 4 : 1 : **When applied for** 191

Travelling Expenses (if any) £ : : **When received** 191

MONTHLY ACCOUNT

Jas Dalrymple
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **GLASGOW** 16 JAN. 1917. TUES. 15 MAR 1917

Assigned TRANSMIT TO LONDON

16 JAN. 1917. TUES. 15 MAR 1917

Lloyd's Register Foundation

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