

# REPORT ON BOILERS.

Abn. No. 11999.

No. 36959

Received at London Office

Date of writing Report 10th June 1914 When handed in at Local Office 191 Port of Glasgow  
 No. in Survey held at Glasgow Date, First Survey 13 April 1917 Last Survey 10th June 1914  
 Req. Book. on the main boiler designated no. 251 for S.S. 'Wynndhurst' (Number of Visits 5) Gross 540.1 Tons Net 252.8  
 Master J. Pave Built at Aberdeen By whom built John Lewis & Sons Ltd. When built 1914  
 Engines made at Aberdeen By whom made James Abernethy & Co. Ltd. When made 1914  
 Boilers made at Glasgow By whom made David Rowan & Co. Collieries Ltd. When made 1914  
 Registered Horse Power Owners Bleives' Western Valleys Anthracite Port belonging to Swansea

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel The Steel Co of Scotland

(Letter for record S) Total Heating Surface of Boilers 1741 Is forced draft fitted no. No. and Description of Boilers one S.S. main Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 8.6.14

No. of Certificate 13813 Can each boiler be worked separately no. Area of fire grate in each boiler 53 3/4 No. and Description of safety valves to each boiler no. Area of each valve no. Pressure to which they are adjusted no.

Are they fitted with easing gear no. 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 outside Mean dia. of boilers 13'9" Length 10'6"

Material of shell plates Steel Thickness 1 3/32" Range of tensile strength 28/32 Are the shell plates welded or flanged no.

Descrip. of riveting: cir. seams D.R.LAP. long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8 3/8"

Lap of plates or width of butt straps 17 3/4" Per centages of strength of longitudinal joint rivets 90.2 Working pressure of shell by plate 85.8

rules 184 Size of manhole in shell 12 x 16" Size of compensating ring 29 x 33" No. and Description of Furnaces in each boiler 3 Plain Material Steel Outside diameter 40 9/16" Length of plain part top 6 1/2" Thickness of plates bottom 6 1/2" crown 3/4" bottom 1/4"

Description of longitudinal joint welded No. of strengthening rings no. Working pressure of furnace by the rules 182 Combustion chamber plates: Material Steel Thickness: Sides 1/16" Back 19/32" Top 1/16" Bottom 1/16" Pitch of stays to ditto: Sides 10 1/2 x 8 1/2" Back 8 1/4 x 8 1/2"

Top 9 1/2 x 9 1/2" If stays are fitted with nuts or riveted heads none Working pressure by rules 180 Material of stays Steel Area at smallest part 2.07 sq" Area supported by each stay 91.5 sq" Working pressure by rules 204 End plates in steam space: Material Steel Thickness 1 1/8"

Pitch of stays 18 x 14 1/2" How are stays secured none Working pressure by rules 180 Material of stays Steel Area at smallest part 5.93 sq"

Area supported by each stay 314 sq" Working pressure by rules 196 Material of Front plates at bottom Steel Thickness 15/16" Material of Lower back plate Steel Thickness 49/64" Greatest pitch of stays 12 5/8" Working pressure of plate by rules 181 Diameter of tubes 3 1/4"

Pitch of tubes 4 3/8 x 4 1/2" Material of tube plates Steel Thickness: Front 15/16" Back 13/16" Mean pitch of stays 13 1/2 x 8 3/4" Pitch across wide water spaces 13 5/8" Working pressures by rules 200 + 181 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8" x 13" D. Length as per rule 30 19/32" Distance apart 9 1/2" Number and pitch of Stays in each two 9 1/2"

Working pressure by rules 186 Steam dome: description of joint to shell none % of strength of joint no.

Diameter no. Thickness of shell plates no. Material no. Description of longitudinal joint no. trim. of rivet holes no.

Pitch of rivets no. Working pressure of shell by rules no. Crown plates no. Thickness no. How stayed no.

Tested by Hydraulic Pressure to no.

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler no. Is Easing Gear fitted no.

Pressure to which each is adjusted no.

Survey request form no. attached no. Is the approved plan of boiler forwarded herewith yes.

Dates of Survey: During progress of work in shops 1914 Apr. 13 May 3 22 June 8. 19 Total No. of visits 5

while building: During erection on board vessel no.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey in accordance with the approved plans & the material & workmanship are of good quality. This boiler is to the order of Messrs John Lewis & Sons Aberdeen & is being shipped to Aberdeen; at which port it will be fitted on board.

Survey Fee £ 5 : 16 : - When applied for 18.6.1914 Boiler fitted on board above named vessel yes.  
 Travelling Expenses (if any) £ - : - : - When received 24.4.1914 (Adv. Abn.) See Mack & Report. Abn. No. 11999

Committee's Minute GLASGOW 26 JUN. 1917 FRI. OCT. 1917  
 Assigned TRANSMIT TO LONDON

Engineer Surveyor to Lloyd's Register of Shipping. John H. Heck for Self & A. M. Keard  
 Lloyd's Register Foundation