

## REPORT ON BOILERS.

No. 12225

WED. 30. APR. 1919

Received at London Office

Date of writing Report 29<sup>th</sup> April 1919 When handed in at Local Office 29<sup>th</sup> April 1919 Port of Aberdeen  
 No. in Survey held at Aberdeen Date, First Survey Jan 30<sup>th</sup> 1919 Last Survey March 25<sup>th</sup> 1919  
 Reg. Book. on the Marine Boiler for Admiralty Drifter (Number of Visits 9) Tons } Gross  
 Master Built at By whom built When built  
 Engines made at By whom made when made  
 Boilers made at Aberdeen By whom made John Lewis & Sons No 88 when made 1919  
 Registered Horse Power Owners Port belonging to

**MULTITUBULAR BOILERS** — MAIN, ~~AUXILIARY OR DONKEY~~ — Manufacturers of Steel D. Colville  
 (Letter for record S) Total Heating Surface of Boilers 814 Is forced draft fitted No No. and Description of  
 Boilers one single ended Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 25.3.19  
 No. of Certificate 966 Can each boiler be worked separately ✓ Area of fire grate in each boiler 30.5 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 ? <sup>INSIDE</sup> Mean dia. of boilers 10'-0" Length 9'-7<sup>3</sup>/<sub>4</sub>"  
 Material of shell plates S Thickness 27/32 Range of tensile strength 28/32 tons Are the shell plates welded or flanged yes  
 Descrip. of riveting: cir. seams D. Riv. Cap long. seams I Riv. Butt Diameter of rivet holes in long. seams 15/16 Pitch of rivets 7"  
 Lap of plates or width of butt straps 13<sup>3</sup>/<sub>4</sub>" Per centages of strength of longitudinal joint rivets 86.9 Working pressure of shell by  
 rules 181.3 Size of manhole in shell 12" x 16" Size of compensating ring 6" x 27/32 plate 86.6  
 boiler Two plain Material steel Outside diameter 3'-2" Length of plain part <sup>top</sup> 6'-0" Thickness of plates <sup>crown</sup> 11/16  
 Description of longitudinal joint weld No. of strengthening rings 3 x 3 x 7/8 Working pressure of furnace by the rules 180 lbs Combustion chamber  
 plates: Material S Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 9/16 Pitch of stays to ditto: Sides 8" x 7<sup>1</sup>/<sub>2</sub>" Back 8" x 7<sup>1</sup>/<sub>2</sub>"  
 Top 8" x 7" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 182 lbs Material of stays steel AREA  
 smallest part 1'-5" Area supported by each stay 60" Working pressure by rules 198 End plates in steam space: Material S Thickness 7/8  
 Pitch of stays 14" x 14" How are stays secured By N & H Working pressure by rules 185 Material of stays S AREA  
 Area supported by each stay 196" Working pressure by rules 180 Material of Front plates at bottom S Thickness 7/8 Material of  
 Lower back plate S Thickness 7/8 Greatest pitch of stays 13<sup>1</sup>/<sub>4</sub>" x 7<sup>1</sup>/<sub>2</sub>" Working pressure of plate by rules 230 Diameter of tubes 3<sup>1</sup>/<sub>4</sub>"  
 Pitch of tubes 4<sup>1</sup>/<sub>4</sub>" x 4<sup>1</sup>/<sub>8</sub>" Material of tube plates S Thickness: Front 7/8 Back 11/16 Mean pitch of stays 8<sup>1</sup>/<sub>16</sub>" Pitch across wide  
 water spaces 13<sup>1</sup>/<sub>4</sub>" Working pressures by rules 180 lbs Girders to Chamber tops: Material steel Depth and thickness of  
 girder at centre 8" x 9<sup>1</sup>/<sub>16</sub>" x 2" Length as per rule 28<sup>1</sup>/<sub>16</sub>" Distance apart 7 Number and pitch of Stays in each 2 at 8"  
 Working pressure by rules 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,

JOHN LEWIS &amp; SONS, LTD.

Jas. J. Donald Manufacturers

Dates of Survey } During progress of work in shops - - } JAN 30 FEB 4. 7. 15. MAR 3. 14. 20. 21. 25.  
 while building } During erection on board vessel - - - }

Is the approved plan of boiler forwarded herewith NoTotal No. of visits 9

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

This Boiler has been built under special survey the material and workmanship are good

Survey Fee £ 4 : 10 :  
 Travelling Expenses (if any) £ :

When applied for, 29<sup>th</sup> April 1919When received, 17<sup>th</sup> April 1919

Reginald F. Bain & W. Wilson  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute ERI.5-MAR. 1920

Assigned

See fl. upon hull attached