

REPORT ON BOILERS.

No. 347/56.

FRI. 27 SEP. 1918

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Date of writing Report *3rd May 1918* When handed in at Local Office *1918* Port of *Glasgow & Goolle*
 No. in Survey held at *Glasgow & Goolle* Date, First Survey *6/3/1918* Last Survey *29th April 1918*
 Reg. Book. *WILLIAM DOAK* Number of Visits *43* Gross *324*
 on the *Marine Boiler designated N° 1642* *Mersey Type Trawler* Tons Net *149*
 Master *✓* Built at *Goolle* By whom built *The Goolle Shipbuilding Co.* When built *1918*
 Engines made at *Halifax* By whom made *Campbell Gas Engine Co.* When made *1918*
 Boilers made at *Glasgow* By whom made *Lindsay, Barnet & Co.* When made *1918*
 Registered Horse Power Owners *British Admiralty* Port belonging to *✓*

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Steel Coy of Scotland.*

(Letter for record *S.*) Total Heating Surface of Boilers *1440 Sq. ft.* Is forced draft fitted *✓* No. and Description of Boilers *One Single Ended* Working Pressure *200 lbs* Tested by hydraulic pressure to *400 lbs* Date of test *29/4/18*
 No. of Certificate *14253* Can each boiler be worked separately *✓* Area of fire grate in each boiler *148 Sq. ft.* No. and Description of safety valves to each boiler *Two spring loaded* Area of each valve *4.9 sq. in.* Pressure to which they are adjusted *205 lbs*
 Are they fitted with easing gear *yes* 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 *7" boiler lagged* dia. of boilers *13'-9"* Length *10'-6"*
 Material of shell plates *Steel* Thickness *1 5/16"* Range of tensile strength *28/32* Are the shell plates welded or flanged *✓*
 Descrip. of riveting: cir. seams *Lap S.R.* long. seams *Ship Riv. Bulbs* Diameter of rivet holes in long. seams *1 5/16"* Pitch of rivets *9"*
 width of butt straps *1'-7 1/2"* Per centages of strength of longitudinal joint rivets *91.4* plate *88.4* Working pressure of shell by rules *201 lbs*
 Size of manhole in shell *16" x 12"* Size of compensating ring *3'-4" x 2'-6" x 1 1/4"* No. and Description of Furnaces in each boiler *Three plain* Material *Steel* Outside diameter *40"* Length of plain part *3'-8"* Thickness of plates *13/16"*
 Description of longitudinal joint *reed* No. of strengthening rings *✓* Working pressure of furnace by the rules *205 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *3/4"* Back *1/2"* Top *3/4"* Bottom *3/4"* Pitch of stays to ditto: Sides *8 1/2" x 9 1/2"* Back *8 1/2" x 9 1/2"*
 Top *Inders* If stays are fitted with nuts or riveted heads *✓* Working pressure by rules *202 lbs* Material of stays *Steel* Area at smallest part *203 sq. in.* Area supported by each stay *814 sq. in.* Working pressure by rules *215 lbs* End plates in steam space: Material *Steel* Thickness *1 1/2"*
 Pitch of stays *18 1/2" x 18 1/2"* How are stays secured *Washers* Working pressure by rules *205 lbs* Material of stays *Steel* Area at smallest part *75 sq. in.*
 Area supported by each stay *272 sq. in.* Working pressure by rules *228 lbs* Material of Front plates at bottom *Steel* Thickness *1 5/16"* Material of lower back plate *Steel* Thickness *1 1/2"* Greatest pitch of stays *9 1/4" x 1 1/4"* Working pressure of plate by rules *234 lbs* Diameter of tubes *3 1/2"*
 Pitch of tubes *14 1/4" x 4 5/16"* Material of tube plates *Steel* Thickness: Front *1 5/16"* Back *1 1/8"* Mean pitch of stays *10"* Pitch across wide water spaces *14"* Working pressures by rules *300 lbs* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *10 1/2" x 1" x 2"* Length as per rule *36.25 in.* Distance apart *11"* Number and pitch of Stays in each *Three at 8 1/2"*
 Working pressure by rules *200 lbs* 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,

Lindsay Barnet & Co. Manufacturer.

Dates of Survey: During progress of work in shops - *1914 May 6, 12, 14, 16, Apr 23, May 11, 21, 28, June 4, 18, 25, July 3* Is the approved plan of boiler forwarded herewith *Yes*
 while building: During erection on board vessel - *9. 27, Aug 28, 21, 29, Sept 6, Oct 19, 23, 29, Nov 3, 8, 13, 21, Dec 5, 13, 19, 26, 1918 Jan 15, 22, Feb 14, 22, 27, Mar 4, 14, Apr 8, 21, 29.* Total No. of visits *43*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under Special survey. The workmanship & material is good, and the boiler in my opinion suitable for a working pressure of 200 lbs per square inch.*

The boiler is being sent to Goolle, this boiler has been properly fitted and secured on board the vessel at Goolle and the safety valves adjusted under steam.

Survey Fee *7 : 0* When applied for *4.5* 1918
 Travelling Expenses (if any) *11.5* When received *1918*

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW* 7 MAY 1918
 Assigned TRANSMIT TO LONDON

TUE. JUL. 4 1922

See Son Rpt 11273

Lloyd's Register Foundation