

REPORT ON BOILERS.

Received at London Office TUE. AUG. 24 1920

Date of writing Report 191 When handed in at Local Office 9-4-20 Port of Manchester.

No. in Survey held at Leeds Date, First Survey 11th Feb 1919 Last Survey 26th March 1920.

Reg. Book. on the Admiralty Drifter Boiler for N^o 1 Vessel Drifter "Chimera" Tons } Gross 95 } Net 42

Master Built at Winterringham By whom built Routh & Waddingham When built 1920.

Engines made at Sowerby Bridge By whom made Pollit & Wiggell, Ltd. When made 1920

Boilers made at Leeds By whom made Messrs Clayton Son & Co. Ltd. When made 1920.

Registered Horse Power Owners Admiralty Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Spencer & Sons Newcastle-on-Tyne.

Letter for record S Total Heating Surface of Boilers 1810 sq. ft. Is forced draft fitted No. and Description of Boilers 1 cyl. single ended return tube Working Pressure 180 lbs/sq. in. Tested by hydraulic pressure to 360 lbs/sq. in. Date of test 26-3-20

No. of Certificate 56 Can each boiler be worked separately Area of fire grate in each boiler 30 sq. ft. No. and Description of Safety valves to each boiler 2 spring loaded Area of each valve 3.98 sq. in. Pressure to which they are adjusted 180 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 6ft 7" Mean dia. of boilers 120.84" Length 9'6"

Material of shell plates Steel Thickness 27/32 Range of tensile strength 28/32 Are the shell plates welded or flanged Flanged.

Description of riveting: cir. seams Double long. seams Triple riveted Diameter of rivet holes in long. seams 15/16 Pitch of rivets 7"

Width of butt straps 1'-1 3/4" Per centages of strength of longitudinal joint rivets 86.7 plate 86.6 Working pressure of shell by rules 181 lbs

Size of manhole in shell 12" x 16" Size of compensating ring 6" x 27/32 No. and Description of Furnaces in each boiler Two plain Material steel Outside diameter 3'-2" Length of plain part top 6'-4 1/2" Thickness of plates crown 11/16 bottom 11/16

Description of longitudinal joint Lap welded No. of strengthening rings one Working pressure of furnace by the rules 180 lbs 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" x 7 1/4" Back 8" x 7 1/2"

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 at smallest part 1.48" Area supported by each stay 60 sq. in. Working pressure by rules 196 lbs End plates in steam space: Material Steel Thickness 7/8"

Pitch of stays 14" x 14" How are stays secured nuts & washers Working pressure by rules 185 lbs Material of stays Steel Area at smallest part 3.64 sq. in.

Area supported by each stay 196 sq. in. Working pressure by rules 187 lbs Material of Front plates at bottom Steel Thickness 7/8" Material of lower back plate Steel Thickness 7/8" Greatest pitch of stays 16 1/2" x 12" Working pressure of plate by rules 182 lbs Diameter of tubes 3 1/4"

Pitch of tubes 4 3/8" x 4 1/4" Material of tube plates Steel Thickness: Front 7/8" Back 11/16" Mean pitch of stays 8 3/4" x 10 3/8" Pitch across wide water spaces 1'-1 1/4" Working pressures by rules 185 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8" x 1 1/8" Length as per rule 29" Distance apart 7" Number and pitch of Stays in each 25T. 8" P.

Working pressure by rules 191 lbs Steam dome: description of joint to shell % 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

CLAYTON, SON, & CO. LIMITED. The foregoing is a correct description,

Joseph Clayton Manufacturer. DIRECTOR.

Is the approved plan of boiler forwarded herewith

Total No. of visits

Dates During progress of work in shops - - - 1919. 11/2, 21/2, 28/3, 25/4, 16/5, 6/6, 20/6, 4/7, 18/7, 27/7, 15/8, 19/9, 24/9, 7/10, 27/10, 3/11, 7/11, 14/11, 5/12, 1920. 9/1, 23/1

During erection on board vessel - - - 19 1/2, 5/3, 14/3.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under survey and the materials tested according to the rules of the Society. The workmanship is good and the boiler has been tested by hydraulic pressure to 360 lbs per sq. inch and found tight. The boiler is eligible in my opinion to be classed and to have record survey when the mountings have been fitted and safety valves adjusted under steam to 180 lbs/sq. in. The boiler has been stamped for identification.

Survey Fee ... £ 4 : 10 : When applied for, 9-4-20

Travelling Expenses (if any) £ : : When received, 9/6 1920 NR

No 56
L10425 Test
360 lbs/sq. in
26-3-20
W.P. 180 lbs/sq. in
P. H. S. L.

Committee's Minute assigned See Stall Rpt 32014

FRI. AUG. 13 1920

This boiler has been properly fitted & secured on board the drifter "Chimera" & its safety valves adjusted under steam.

Alfred St. James Engineer Surveyor to Lloyd's Register of Shipping.

P. Fitzgerald.

FRI. OCT. 15 1920

005961-005980-0183