

REPORT ON BOILERS.

No. 8723

Received at London Office

FRI APR 27 1922

Date of writing Report 3rd April 1922 When handed in at Local Office

Port of Belfast

No. in Survey held at Belfast

Date, First Survey 29th Aug 1919 Last Survey 30th March 1922

Reg. Book. on the T.S.S. Banabool

(Number of Visits 114) Gross Tons Net

Master Built at Belfast By whom built Harland & Wolff L^{td} When built 1922

Engines made at Belfast By whom made - When made -

Boilers made at - By whom made - When made -

Registered Horse Power 1 Owner Peninsular & Oriental S. N. Coy L^{td} Belonging to Belfast

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel D. Colville & Sons L^{td}

Letter for record P. Total Heating Surface of Boilers 9171 sq ft Is forced draft fitted Yes No. and Description of Boilers 3 Single End Cylinders Working Pressure 215 lbs Tested by hydraulic pressure to 430 lbs Date of test 22-10-21 24-10-21

No. of Certificates 800/2 Can each boiler be worked separately Yes Area of fire grate in each boiler 7 1/2 sq ft No. and Description of Safety valves to each boiler 2 Direct Spring Area of each valve 10'32 sq in Pressure to which they are adjusted 215 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 22 in Mean dia. of boilers 16'-4 7/8" Length 11'-8"

Material of shell plates Steel Thickness 1 3/4" Range of tensile strength 30-33 tons Are the shell plates welded or flanged No

Description of riveting: cir. seams Lap Rivet long. seams Butt Rivet Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 10 1/4"

Up of plates or width of butt straps 23 1/2" Per centages of strength of longitudinal joint rivets 91.7 plate 84.4 Working pressure of shell by rules 224 lbs

Size of manhole in shell 16" x 12" Size of compensating ring 14" No. and Description of Furnaces in each boiler 4 Horizontal Material Steel Outside diameter 43 1/2" Length of plain part top 3" bottom 8" Thickness of plates crown 3 5/8" bottom 3 5/8"

Description of longitudinal joint Weld No. of strengthening rings 0 Working pressure of furnace by the rules 231 lbs Combustion chamber

Material Steel Thickness: Sides 3/32" Back 3/32" Top 7/32" Bottom 7/8" Pitch of stays to ditto: Sides 8" x 8" Back 8 1/2" x 7 1/2"

Top 8 1/2" x 7 1/2" If stays are fitted with nuts or riveted heads Nuts incised Working pressure by rules 233 lbs Material of stays Steel Area

Smallest part 1765 2125 sq in Area supported by each stay 64 sq in Working pressure by rules 220 lbs plates in steam space: Material Steel Thickness 1 1/8"

Pitch of stays 16" x 15 1/2" How are stays secured Screwed into plates & single nuts Working pressure by rules 222 lbs Material of stays Steel Area

Area supported by each stay 296 5/8 sq in Working pressure by rules 202 lbs Material of Front plates at bottom Steel Thickness 7/8" Material of

Lower back plate Steel Thickness 7/8" Greatest pitch of stays 12 1/2" Working pressure of plate by rules 247 lbs Diameter of tubes 2 1/2"

Pitch of tubes 3 1/4" x 3 1/4" Material of tube plates Steel Thickness: Front 7/8" Back 13/16" Mean pitch of stays 7 1/2" Pitch across wide

Water spaces 13 1/2" Working pressures by rules 346 lbs with 1 1/2" doubler Girders to Chamber tops: Material Steel Depth and thickness of

Order at centre 9 3/4" (8 1/2" x 2) Length as per rule 34" Distance apart 8 1/2" x 8" Number and pitch of Stays in each 3-7 1/2"

Working pressure by rules 219 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

Boles 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,

F. E. Blech Manufacturer.

Dates of Survey During progress of work in shops - - while building During erection on board vessel - -

See other sheet

Is the approved plan of boiler forwarded herewith Yes

Total No. of visits

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

See other sheet

Survey Fee ... £ : : When applied for, 191 Travelling Expenses (if any) £ : : When received, 191

R. F. Bevenish Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

Assigned

THU. 13 APR. 1922

Belfast

T.S.S. Barrabool

List of Pumps.

2 Main Circulating	39" Propeller
2 sets Main Air (Weirs)	11" x 20" x 15"
1 Bilge	10 1/2" x 13" x 24"
1 Ballast	-
1 Sanitary	-
3 Main Feed	15 1/2" x 11 1/2" x 26"
1 Aux	9 1/2" x 7" x 21"
1 F. Water	5" x 5" x 9"
1 Ash Ejector	12" x 8" x 10"
1 Emergency Bilge Electric driven	10 1/2" x 9"

Principal items of Spare Gear

H. P. piston & piston rod
packing rings, set.

M. P. & L. P.

Set top end & bottom end brasses

H. P. & M. P. piston valves & packing

4 slide valve spindles

1 Eccentric pulley & strap with bolts for H. P.
M. P. or L. P.

1 Propeller shaft & 2 M. B. propeller blades

Set studs & nuts

50 Condenser tubes & 100 ferrules

25 Boiler tubes & 4 Safety valve springs

Set main & aux. feed check valves

Gland for cylinder stuffing box.

Set spare gear for all Pumps, and all gear to

Lloyd's Rules extra

O. F. O'Rourke

A. S. Southwell.