

# REPORT ON BOILERS.

No. 9902

Received at London Office

23 JAN 1928

Date of writing Report 191 When handed in at Local Office 21<sup>st</sup> Jan. 1928 Port of Belfast

No. in Survey held at Belfast Date, First Survey see first entry machinery report Last Survey 191

Reg. Book. No 271 on the Steel Sc. CHESAPEAKE (Number of Visits ) Gross Tons Not

Master Built at Belfast By whom built Workman Clark & Co. Ltd. When built 1928

Engines made at Belfast By whom made Workman Clark & Co. Ltd. When made 1928

Boilers made at Belfast By whom made Workman Clark & Co. Ltd. When made 1928

Registered Horse Power Owners Anglo American Oil Co. Ltd. Port belonging to Belfast

## MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY. — Manufacturers of Steel Wm Beardmore & Co. Ltd.

(Letter for record S. ) Total Heating Surface of Boilers 1818 sq ft Is forced draft fitted Yes No. and Description of Boilers one S. C. Cylindrical Working Pressure 150 lbs. Tested by hydraulic pressure to 275 lbs. Date of test 4. 11. 27

No. of Certificate 913 Can each boiler be worked separately Yes Area of fire grate in each boiler Oil fired No. and Description of safety valves to each boiler Two special S.H. Spring loaded Area of each valve 4.9 sq in Pressure to which they are adjusted 150 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 over 5'0" Mean dia. of boilers 15 1/2" Length 11'-6"

Material of shell plates Steel Thickness 29" Range of tensile strength 28-32 lbs Are the shell plates welded or flanged No.

Descrip. of riveting: cir. seams double long. seams helix d.t.s. Diameter of rivet holes in long. seams 32" Pitch of rivets 6 3/8"

Top of plates or width of butt straps 13 5/8" Per centages of strength of longitudinal joint rivets 85.96 Working pressure of shell by rules 152 lbs. Size of manhole in shell 15" x 19" Size of compensating ring 32 1/2" x 32 1/8" x 29"

No. and Description of Furnaces in each boiler 3 main Material Steel Outside diameter 38" Length of plain part top 85.78 Thickness of plates crown 1/2" bottom 1/2"

Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 189 lbs. Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 1/16" Top 9/16" Bottom 1/16" Pitch of stays to ditto: Sides 8 1/2" x 7 1/8" Back 8" x 7 3/4"

Top 9 1/2" x 7" If stays are fitted with nuts or riveted heads both Working pressure by rules 158 lbs. Material of stays Steel Diameter at smallest part 1 3/32" Area supported by each stay 62 sq in Working pressure by rules 163 lbs. End plates in steam space: Material Steel Thickness 1 1/16"

Pitch of stays 17" x 19" How are stays secured double - nut Working pressure by rules 160 lbs. Material of stays Steel Diameter at smallest part 2 1/2"

Area supported by each stay 323 sq in Working pressure by rules 170 lbs. Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate Steel Thickness 1 1/16" Greatest pitch of stays 13 1/2" x 7 3/4" Working pressure of plate by rules 222 lbs. Diameter of tubes 2 1/2"

Pitch of tubes 2 7/8" x 3 3/4" Material of tube plates Steel Thickness: Front 7/8" Back 3/4" Mean pitch of stays 9 1/4" Pitch across wide water spaces 13 1/2" x 7 1/4" Working pressures by rules front 160 lbs back 155 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8"-1 1/2" Length as per rule 31 9/16" Distance apart 9 1/2" Number and pitch of Stays in each three 7"

Working pressure by rules 154 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, FOR WORKMAN, CLARK & CO., LIMITED Manufacturer.

Is the approved plan of boiler forwarded herewith yes.

Total No. of visits

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

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

This Boiler was constructed under special survey. The materials & workmanship are considered good. It has been efficiently installed on board the vessel & the safety valves were adjusted under steam.

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

R Lee Ames Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUES. 31 JAN 1928 Assigned See Rpt. attached



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