

REPORT ON BOILERS.

Received at London Office 16 SEP 1924

apt. No.

Date of writing Report ... when made in at Local Office 15 SEP 1924 Port of **SUNDERLAND.**

No. in Survey held ... Date, First Survey 16 July 1924 Last Survey 11 Sept. 1924

Reg. Book. on the ... (Number of Visits 10) Gross Tons Net

Master ... By whom built ... When built

Engines made at ... By whom made ... When made

Boilers made at **Sunderland** ... By whom made **Messrs G. Clark & Co. (1139 1/2)** ... When made 1924

Registered Horse Power ... Owners ... Port belonging to

MULTITUBULAR BOILERS - MAIN, ~~AUXILIARY OR DONKEY~~ - Manufacturers of Steel **S. Colville & Co.**

Letter for record **S** Total Heating Surface of Boilers **1613 sq ft** Is forced draft fitted **No** No. and Description of Boilers **one single shell**

Working Pressure **180 lb** Tested by hydraulic pressure to **320 lb** Date of test **11.9.24**

No. of Certificate **3901** Can each boiler be worked separately ... Area of fire grate in each boiler **45.2 sq ft** No. and Description of safety valves to each boiler

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 ... Mean dia. of boilers **13-6** Length **10.0**

Material of shell plates **S** Thickness **1 3/32** Range of tensile strength **28-32** Are the shell plates welded or flanged **No**

Descrip. of riveting: cir. seams **lap dk** long. seams **d. b. to riv.** Diameter of rivet holes in long. seams **1/8** Pitch of rivets **8"**

Lap of plates or width of butt straps **17 1/8** Per centages of strength of longitudinal joint ... Working pressure of shell by rules **181**

Size of manhole in shell **12 x 16** Size of compensating ring **2.7 1/2 x 2.3 1/2 x 1 3/32** No. and Description of Furnaces in each boiler **3 Brighton**

Material **S** Outside diameter **3-5 1/2** Length of plain part ... Thickness of plates ...

Description of longitudinal joint **welded** No. of strengthening rings ... Working pressure of furnace by the rules **187** Combustion chamber plates: Material **S** Thickness: Sides **23/32** Back **1/16** Top **23/32** Bottom **23/32**

Pitch of stays to ditto: Sides **10 1/2 x 9 1/2** Back **9 3/4 x 9 1/4**

Top **9 1/2 x 10 1/2** Working pressure by rules **180** Material of stays **S** Area supported by each stay **108 sq in** Working pressure by rules **180**

End plates in steam space: Material **S** Thickness **1 3/16** Pitch of stays **21 x 17** How are stays secured **d. u. + w.** Working pressure by rules **180**

Material of stays **S** Area supported by each stay **314 sq in** Working pressure by rules **188** Material of Front plates at bottom **S** Thickness **13/16**

Material of Lower back plate **S** Thickness **7/8** Greatest pitch of stays **16 x 9 1/4** Working pressure of plate by rules **183** Diameter of tubes **3 1/2**

Pitch of tubes **4 3/4 x 4 5/8** Material of tube plates **S** Thickness: Front **13/16** Back **25/32** Mean pitch of stays **10 7/8** Pitch across wide water spaces **14 3/8 dk**

Working pressures by rules **182** Girders to Chamber tops: Material **S** Depth and thickness of girder at centre **7 1/8 x 13/4** Length as per rule **31"** Distance apart **10 1/2"**

Number and pitch of Stays in each **2, 9 1/2** Working pressure by rules **183** Steam dome: description of joint to shell **NONE** % 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

UPERHEATER. 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

The foregoing is a correct description, **OR GEORGE CLARK LIMITED** *Sept. 2.24* Manufacturers

Dates of Survey ... 1924 July 16, 21, 25, 30, Aug 8, 12, 19, 26 ... Is the approved plan of boiler forwarded herewith **Yes** Total No. of visits **10**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This boiler has been built under special survey, the materials and workmanship are sound and good. The boiler has been forwarded to South Shields to be fitted in the vessel.**

Survey Fee ... £ **10: 14:** When applied for, **15 SEP 1924** Travelling Expenses (if any) £ : : When received, **19 24**

FRI. 14 NOV 1924

G. A. H. H. H. Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Assigned



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