

REPORT ON BOILERS.

No. 71319

Received at London Office **FRI. 11 OCT. 1918**

Date of writing Report **8th Oct. 1918** When handed in at Local Office **10 OCT 1918** Port of **NEWCASTLE-ON-TYNE**
 No. in Survey held at **Newcastle** Date, First Survey **25th Sept. 1914** Last Survey **7th October 1918**
 Reg. Book. on the **S.S. "Wae Haven"** (Number of Visits **16**) Gross Tons }
 Master Built at **Blyth** By whom built **Blyth S. B. Co 206** When built **1918**
 Engines made at **Glasgow** By whom made **McKie & Baxter 897** When made **1918**
 Boilers made at **Newcastle** By whom made **Wallsend Slipway & Eng Co 307B** When made **1918**
 Registered Horse Power Owners **The Shipping Controller** Port belonging to **London**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **Schulz & Knauth & J. Spencer Jones**

Letter for record **S** Total Heating Surface of Boilers **6006 sq ft** Is forced draft fitted **yes** No. and Description of Boilers **Three, single-ended** Working Pressure **180 lbs** Tested by hydraulic pressure to **360 lbs** Date of test **19.2.15**
 No. of Certificate **8760** Can each boiler be worked separately **Area of fire grate in each boiler** No. and Description of Safety valves to each boiler **Area of each valve** Pressure to which they are adjusted
 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' - 7 1/2" Length 11' - 2"**
 Material of shell plates **Steel** Thickness **1 5/32"** Range of tensile strength **28-32** Are the shell plates welded or flanged **no**
 Description of riveting: cir. seams **S. Lap** long. seams **ABS. Y. Rivet** Diameter of rivet holes in long. seams **1 7/32"** Pitch of rivets **8 5/8"**
 Gap of plates or width of butt straps **18 3/4"** Per centages of strength of longitudinal joint **86.9** Working pressure of shell by rules **85.8**
 No. of tubes **189** Size of manhole in shell **16" x 12"** Size of compensating ring **McNeil** No. and Description of Furnaces in each boiler **3 - Molisons** Material **Steel** Outside diameter **43 1/2"** Length of plain part **top 19 1/2" bottom 19"** Thickness of plates **crown 7/16" bottom 7/16"**
 Description of longitudinal joint **Welded** No. of strengthening rings **Working pressure of furnace by the rules 202 lbs** Combustion chamber plates: Material **Steel** Thickness: Sides **2 1/32"** Back **5/8"** Top **2 1/32"** Bottom **1 5/16"** Pitch of stays to ditto: Sides **9" x 9"** Back **8 5/8" x 8 1/2"**
 Top **9 1/2" x 8 1/2"** If stays are fitted with nuts or riveted heads **(nuts)** Working pressure by rules **185 lbs** Material of stays **Steel** Diameter at smallest part **2.03"** Area supported by each stay **80.75 sq in** Working pressure by rules **225 lbs** End plates in steam space: Material **Steel** Thickness **1 9/32"**
 Pitch of stays **20" x 20"** How are stays secured **S. N.** Working pressure by rules **183 lbs** Material of stays **Steel** Diameter at smallest part **7.24"**
 Area supported by each stay **400 sq in** Working pressure by rules **188 lbs** Material of Front plates at bottom **Steel** Thickness **1"** Material of lower back plate **Steel** Thickness **7/8"** Greatest pitch of stays **14"** Working pressure of plate by rules **197 lbs** Diameter of tubes **2 3/4"**
 Pitch of tubes **4" x 4"** Material of tube plates **Steel** Thickness: Front **1"** Back **1 3/16"** Mean pitch of stays **8"** Pitch across wide water spaces **13 1/2"** Working pressures by rules **197 lbs** Girders to Chamber tops: Material **Steel** Depth and thickness of girder at centre **7 5/8" x 1 1/2"** Length as per rule **29 2/32"** Distance apart **9 1/2"** Number and pitch of Stays in each **2 - 8 1/2"**
 Working pressure by rules **180 lbs** Superheater or Steam chest: how connected to boiler **None** Can the superheater be shut off and the boiler worked separately **Yes** Diameter **Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet**
 Plates **Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness**
 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**

FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED.

W. Rainey

The foregoing is a correct description,

Manufacturer.

Dates During progress of work in shops: **1914 Feb. 25, 30, Oct. 8, 15, 26, 29, Nov. 17, Dec. 2, 16** Is the approved plan of boiler forwarded herewith **yes**
 Survey while building: **1915 Jan. 7, 13, 26, Feb. 5, 19, 1918 Oct. 7.** Total No. of visits **16**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **These main boilers have been constructed under special survey & the materials & workmanship are sound & good, they are now being fitted in the above vessel under British Corporation survey.**

Survey Fee ... £ **17:5:9** When applied for, **7/11/18**
 Travelling Expenses (if any) £ : : When received, **30/11/18**

Charles Cooper per **Thomas Field**
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **FRI. 13 DEC. 1918**
 Assigned **L. M. B. 11. 18**