

Rpt. 5a.

## REPORT ON BOILERS.

Udd. F. &amp; Rpt. No. 8551.

No. 8480.

SAL. JUN. 13. 1914

date of writing Report 11.6.14 1914 When handed in at Local Office 12.6. 1914 Port of *Middlesbrough*  
 No. in Survey held at *Stockton-on-Tees* Date, First Survey *March 27th.* Last Survey *June 5th* 1914.  
 Reg. Book. on the *Steel screw steamer "Anglesea"* (Number of Visits *8.*) Gross Tons *(S.S. No. 640)* Net  
 Master Built at *Stockton* By whom built *Richardson Duck & Co* When built  
 Engines made at *Stockton* By whom made *Messrs Blair & Co Ltd (No 1796)* When made *1914*  
 Boilers made at *Stockton* By whom made *Messrs Thomas & Co Ltd (No 3497)* When made *1914*  
 Registered Horse Power Owners *Messrs Jenkins Bros* Port belonging to *Cardiff*

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *John Spencer & Sons*  
 (Letter for record *(S)*) Total Heating Surface of Boilers *1240 sq ft* Is forced draft fitted *no* No. and Description of Boilers *One single ended* Working Pressure *100* Tested by hydraulic pressure to *200* Date of test *5.6.14*  
 No. of Certificate *5314* Can each boiler be worked separately *—* Area of fire grate in each boiler *36 sq ft* No. and Description of safety valves to each boiler *2 direct spring* Area of each valve *7.07* Pressure to which they are adjusted *105 lb*  
 Are they fitted with easing gear *yes* In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler *no*  
 Smallest distance between boilers or uptakes and bunkers or woodwork *on upper deck* *external* dia. of boilers *11'-0"* Length *11'-0"*  
 Material of shell plates *steel* Thickness *2 1/32"* Range of tensile strength *29-33* Are the shell plates welded or flanged *no*  
 Descrip. of riveting: cir. seams *S. lap* long. seams *3 Riv. lap* Diameter of rivet holes in long. seams *15/16* Pitch of rivets *3 1/2*  
 Lap of plates or width of butt straps *6 1/2* Per centages of strength of longitudinal joint rivets *76.7* Working pressure of shell by rules *101* Size of manhole in shell *16" x 12"* Size of compensating ring *5 1/2 x 2 1/32* No. and Description of Furnaces in each boiler *2 plain* Material *steel* Outside diameter *40 1/2"* Length of plain part *87 1/2"* Thickness of plates crown *1 1/32* bottom *1 1/8* mean *1 1/8*  
 Description of longitudinal joint *weld* No. of strengthening rings *one* Working pressure of furnace by the rules *900* Combustion chamber plates: Material *steel* Thickness: Sides *1 1/2* Back *1 1/2* Top *1 1/2* Bottom *1 1/2* Pitch of stays to ditto: Sides *9 1/2 x 8 1/2* Back *9 x 8 1/2* Top *9 1/2 x 8 1/2* If stays are fitted with nuts or riveted heads *none* Working pressure by rules *110* Material of stays *steel* Diameter at smallest part *1.19* Area supported by each stay *78.75* Working pressure by rules *121* End plates in steam space: Material *steel* Thickness *3/4"* Pitch of stays *17 1/2 x 14 1/2* How are stays secured *none* Working pressure by rules *103* Material of stays *steel* Diameter at smallest part *2.66*  
 Area supported by each stay *236* Working pressure by rules *117* Material of Front plates at bottom *steel* Thickness *3/4"* Material of Lower back plate *steel* Thickness *3/4"* Greatest pitch of stays *13 x 8 1/2"* Working pressure of plate by rules *158* Diameter of tubes *3 1/4"* Pitch of tubes *4 1/2 x 4 1/4* Material of tube plates *steel* Thickness: Front *3/4"* Back *5/8"* Mean pitch of stays *11"* Pitch across wide water spaces *13 3/4"* Working pressures by rules *114* Girders to Chamber tops: Material *steel* Depth and thickness of girder at centre *6 1/2 x 1 1/4* Length as per rule *28 1/2* Distance apart *9 1/2* Number and pitch of Stays in each *2 @ 8 1/2"*  
 Working pressure by rules *104* Superheater or Steam chest: how connected to boiler *none* 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

SURVEY REQUEST  
 NO. *916* ATTACHED.

The foregoing is a correct description,  
 THOMAS SUDRON & CO. LIMITED. Manufacturer.

Dates of Survey During progress of work in shops - *Mar. 27, Apr. 6-16, May. 1-20-22-27, Jun. 5.*  
 while building During erection on board vessel - - -

Is the approved plan of boiler forwarded herewith *yes*  
 Total No. of visits *8.*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey; is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results. The boiler is to be fitted on board at this port.*

*This boiler has now been satisfactorily secured on board, examined under steam and safety valves adjusted*

Survey Fee ... £ *4-3-0* When applied for, *MONTHLY A/o.* 191  
 Travelling Expenses (if any) £ : : When received, 191

*Wm Morrison*  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. JUL. 28. 1914

Assigned *See minute on rpt. attached*