

REPORT ON BOILERS.

Hull No. 5065.

Hull - 19197

Received at London Office

FRI. 19 JUL 1907

Date of writing Report 30th May 1907 When handed in at Local Office 30th May 1907 Port of MIDDLESBROUGH-ON-TEES
 No. in Survey held at Stockton Date, First Survey 9th April 07 Last Survey 17th 7th 1907
 Reg. Book. 935 on the Main Boiler (No 3820) S. H. City of Aberdeen (Number of Visits) Gross 88 Net 14
 Master Built at Selby By whom built Cochrane Sons When built 1907
 Engines made at Bolton By whom made A. G. Mumford Ltd when made 1907
 Boilers made at Stockton By whom made Piley Bros Ltd when made 1907
 Registered Horse Power 35 Owners London & Peterhead S. F. Co. Ltd Port belonging to Peterhead

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons Ltd(Letter for record (S)) Total Heating Surface of Boilers 760 ft² Is forced draft fitted No. and Description ofBoilers One Cyl. Mult. Single ended Working Pressure 140 Tested by hydraulic pressure to 280 Date of test 24-5-07No. of Certificate 3928 Can each boiler be worked separately — Area of fire grate in each boiler 28.4 ft² No. and Description ofsafety valves to each boiler Two Spring Area of each valve 3.14 ft² Pressure to which they are adjusted 140 lbsAre 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 4" Intt Mean dia. of boilers 9'-6" Length 9'-0"Material of shell plates Steel Thickness $\frac{21}{32}$ " Range of tensile strength 28.4 tons Are the shell plates welded or flanged noDescrip. of riveting: cir. seams D.R.L. long. seams D.Butt St. Diameter of rivet holes in long. seams $\frac{15}{16}$ " Pitch of rivets $5\frac{1}{2}$ " 1 rowLap of plates or width of butt straps Butt 13" x $\frac{1}{2}$ " Per centages of strength of longitudinal joint rivets 96 Working pressure of shell byrules 146 Size of manhole in shell 12" x 16" Size of compensating ring 7" x $\frac{1}{2}$ " No. and Description of Furnaces in eachboiler 2 plain Material Steel Outside diameter 2'-11" Length of plain part 5'-8" Thickness of plates $\frac{11}{16}$ "Description of longitudinal joint welded No. of strengthening rings ✓ Working pressure of furnace by the rules 154 Combustion chamberplates: Material Steel Thickness: Sides $\frac{9}{16}$ " Back $\frac{19}{32}$ " Top $\frac{9}{16}$ " Bottom $\frac{3}{4}$ " Pitch of stays to ditto: Sides $8\frac{3}{4}$ " x $8\frac{1}{2}$ " Back $9\frac{1}{2}$ " x $8\frac{1}{2}$ "Top $8\frac{1}{2}$ " x $8\frac{1}{2}$ " If stays are fitted with nuts or riveted heads nuts Working pressure by rules 150 Material of stays Steel Diameter atsmallest part $\frac{13}{8}$ " Area supported by each stay 80.75 " Working pressure by rules 146 End plates in steam space: Material Steel Thickness $\frac{7}{8}$ "Pitch of stays $17\frac{1}{2}$ " x $16"$ How are stays secured by nuts Working pressure by rules 140 Material of stays Steel Diameter at smallest part $2\frac{3}{8}$ "Area supported by each stay 284 " Working pressure by rules 156 Material of Front plates at bottom Steel Thickness $\frac{7}{8}$ " Material ofLower back plate Steel Thickness $\frac{7}{8}$ " Greatest pitch of stays $11\frac{1}{2}$ " x $8\frac{1}{2}$ " Working pressure of plate by rules 275 Diameter of tubes $3\frac{1}{4}$ "Pitch of tubes $4\frac{1}{2}$ " x $4\frac{1}{2}$ " Material of tube plates Steel Thickness: Front $\frac{7}{8}$ " Back $\frac{21}{32}$ " Mean pitch of stays $9\frac{5}{8}$ " Pitch across widewater spaces $13\frac{1}{2}$ " Working pressures by rules 161 Girders to Chamber tops: Material Steel Depth and thickness ofgirder at centre $6\frac{3}{4}$ " x $1\frac{1}{2}$ " Length as per rule 2'-3" Distance apart 8" Number and pitch of Stays in each two 8"Working pressure by rules 164 Superheater or Steam chest: how connected to boiler intert Can the superheater be shut off and the boiler workedseparately ✓ Diameter 2'-6" Length 2'-0" Thickness of shell plates $\frac{1}{2}$ " Material Steel Description of longitudinal joint S.R.L. Diam. of rivetholes $\frac{13}{16}$ " Pitch of rivets 2" Working pressure of shell by rules 231 Diameter of flue ✓ Material of flue plates ✓ Thickness ✓If stiffened with rings ✓ Distance between rings ✓ Working pressure by rules ✓ End plates: Thickness $\frac{3}{4}$ " How stayed 2 StayWorking pressure of end plates ✓ Area of safety valves to superheater ✓ Are they fitted with easing gear ✓FOR
The foregoing is a correct description,
RILEY BROS. BOILERMAKERS LIMITED.

Manufacturer.

Dates of Survey: During progress of work in shops - - - 1907. Apr 9. 23. 25. 29 May 1. 4. 7. 10. 16. 23. 24. Is the approved plan of boiler forwarded herewith Yes
 while building: During erection on board vessel - - -
 Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. This boiler has been built under Special Survey. The materials and workmanship are good and efficient.

This boiler fitted on board, tested under steam, found satisfactory, eligible in my opinion to be classed with the notation of L.M.C. 7.07 in the Register Book.

Survey Fee When applied for, 19
 Travelling Expenses (if any) £ 2.13.4 When received, 20.9.07 19

R.D. Philston

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

Committee's Minute

TUES. JUL 23 1907

FRI. 11 SEP 1907

TUES 30 MAR 1909

Assigned

Lloyd's Register
Foundation

W1412-0175