

# REPORT ON BOILERS.

MON. AUG. 10. 1914

TUE. JUN. 30 1914.

Received at London Office

Writing Report 29.6.14 When handed in at Local Office 29.6.14 Port of Middlesbrough  
 Survey held at Stockton-on-Tees Date, First Survey April 16th Last Survey June 25th 1914  
 Book on the S.S. HAMBLETON RANGE (S.S. No. 542) (Number of Visits 12) Tons } Gross  
 } Net  
 Built at W. Hartlepool By whom built Irvin & Co. Ltd. When built  
 Made at Stockton By whom made Thomas Hudson & Co. Ltd. (No. 3467) When made 1914  
 Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

**L** **T** **T** **U** **B** **U** **L** **A** **R** **I** **O** **N** **D** **O** **N** **K** **E** **Y**. — Manufacturers of Steel John Spencer & Sons

For record (S) Total Heating Surface of Boilers 820 sq ft Is forced draft fitted \_\_\_\_\_ No. and Description of \_\_\_\_\_  
 One single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 25.6.14

Certificate 5328 Can each boiler be worked separately \_\_\_\_\_ Area of fire grate in each boiler 29 sq ft No. and Description of \_\_\_\_\_  
 valves to each boiler No, direct spring Area of each valve 5.9 sq in Pressure to which they are adjusted 100 lbs

they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No  
 External Mean dia. of boilers 10'-0" Length 10'-0"

Material of shell plates steel Thickness 19/32 Range of tensile strength 29-32 1/2 Are the shell plates welded or flanged No  
 Riveting: cir. seams 2 R. lap long. seams 3 R. lap Diameter of rivet holes in long. seams 15/16 Pitch of rivets 3 3/8

plates or width of butt straps 6 1/2 Per centages of strength of longitudinal joint rivets 82.5 Working pressure of shell by plate 74.15  
 Size of manhole in shell 16" x 12" Size of compensating ring 5 1/2 x 13/16 No. and Description of Furnaces in each \_\_\_\_\_  
 2 plain Material steel Outside diameter 36" Length of plain part top 79.4 Thickness of plates crown 19/32 bottom 104 bottom .63 mean

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 115 Combustion chamber \_\_\_\_\_  
 Material steel Thickness: Sides 15/32 Back 15/32 Top 15/32 Bottom 3/4 Pitch of stays to ditto: Sides 7 1/4 x 7 Back 7 1/4 x 7 1/4

8 1/4 x 7 1/4 stays are fitted with nuts or riveted heads nuts Working pressure by rules 112 Material of stays steel Diameter at \_\_\_\_\_  
 smallest part .96 Area supported by each stay 60 Working pressure by rules 128 and plates in steam space: Material steel Thickness 29/32  
 How are stays secured nuts & washers Working pressure by rules 117 Material of stays steel Diameter at smallest part 4.3

Area supported by each stay 337 Working pressure by rules 133 Material of Front plates at bottom steel Thickness 29/32 Material of \_\_\_\_\_  
 Working pressure by rules 124 Diameter of tubes 3 1/4

over back plate steel Thickness 29/32 Greatest pitch of stays 14 x 7 3/4 Working pressure of plate by rules 124 Diameter of tubes 3 1/4  
 Material of tube plates steel Thickness: Front 29/32 Back 21/32 Mean pitch of stays 11 7/16 Pitch across wide \_\_\_\_\_

Water spaces 14" Working pressures by rules 121 Girders to Chamber tops: Material steel Depth and thickness of \_\_\_\_\_  
 Order at centre 5 1/2 x 1 1/4 Length as per rule 25 1/2 Distance apart 8 1/4 Number and pitch of Stays in each 2 @ 7"

Working pressure by rules 107 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked \_\_\_\_\_  
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet \_\_\_\_\_

Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness \_\_\_\_\_  
 End plates: Thickness How stayed \_\_\_\_\_

stiffened with rings Distance between rings Working pressure by rules Are they fitted with easing gear \_\_\_\_\_  
 Working pressure of end plates Area of safety valves to superheater \_\_\_\_\_

**SURVEY REQUEST**  
**NO. 926. ATTACHED.**

The foregoing is a correct description,  
THOMAS HUDSON & CO. LIMITED, Manufacturer.  
T. Hudson

Dates of Survey } During progress of work in shops - - - } 1914. Apr. 16. 22. 24 May 7. 12. 20. 27 Jun 5. 10. 22. 24 Is the approved plan of boiler forwarded herewith yes Returned  
 while building } During erection on board vessel - - - } 25. Return for duplicate Boiler 17/14.  
 Total No. of visits 12

**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. Boiler will be secured to safety valves adjusted under steam as per work sheet.

Survey Fee ... £ 2-15-0 MONTHLY A/c. When applied for, 191...  
 Travelling Expenses (if any) £ : : When received, 191...

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

Committee's Minute FRI. AUG. 14. 1914  
 Assigned See minute on Spl. fe. 14972

