

REPORT ON BOILERS.

Hpl. No. 13336
No. 5116

Received at London Office **MON. 2 SEP 1907**

Date of writing Report **19** When handed in at Local Office **5. 7 1907** Port of **MIDDLESBROUGH-ON-TEES.**

No. in Survey held at **Darlington** Date, First Survey **May 27** Last Survey **19**

Reg. Book. **28** on the **Donkey Boiler (No 107) for the S/S "COMPETITOR"** Tons } Gross **3525.83**
Net **2215.88**

Master **W. W. Millburn** Built at **Wid Hartlepool** By whom built **Furness Wm & Co. Ltd** When built **1907**

Engines made at **Hartlepool** By whom made **Richardsons Wessforth & Co. Ltd** when made **1907**

Boilers made at **Darlington** By whom made **Blake Boiler Wagon Eng Co Ltd** when made **1907**

Registered Horse Power _____ Owners **Exhale ss Co. Ltd (b. Smales Donkey)** Port belonging to **Whitby**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **J. Peacock & Son Ltd**

(Letter for record **S.**) Total Heating Surface of Boilers **569 sq ft** Is forced draft fitted **No** No. and Description of Boilers **One Cyl. Mult. single ended Working Pressure 100** Tested by hydraulic pressure to **200** Date of test **4/7/07**

No. of Certificate **3960** Can each boiler be worked separately **Yes** Area of fire grate in each boiler **27 sq ft** No. and Description of safety valves to each boiler **Two, spring loaded** Area of each valve **5.939 sq ft** Pressure to which they are adjusted **100 lbs per sq in**

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 **D.B. on Main deck** Mean dia. of boilers **9'-6"** Length **9'-0"**

Material of shell plates **Steel** Thickness **7/8"** Range of tensile strength **28/32** Are the shell plates welded or flanged **No**

Descrip. of riveting: cir. seams **S.R.L.** long. seams **D.R.D.B.S.** Diameter of rivet holes in long. seams **13/16"** Pitch of rivets **4 3/8" row**
2 7/8" row

Gap of plates or width of butt straps **9" x 9/16"** Per centages of strength of longitudinal joint rivets **94.4** Working pressure of shell by rules **110** Size of manhole in shell **12" x 16"** Size of compensating ring **7" x 5/8"** No. and Description of Furnaces in each boiler **2 plain** Material **Steel** Outside diameter **3'-0"** Length of plain part **5'-6"** Thickness of plates **5"**
7'-7 1/2" **8"**

Description of longitudinal joint **welded** No. of strengthening rings **1** Working pressure of furnace by the rules **127** Combustion chamber plates: Material **Steel** Thickness: Sides **5/8"** Back **3/4"** Top **5/8"** Bottom **25/32"** Pitch of stays to ditto: Sides **10" x 10 1/2"** Back **9" x 10"**

Top **9" x 11"** If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **101** Material of stays **Steel** Area at smallest part **1.5 sq in** Area supported by each stay **90 sq in** Working pressure by rules **133** End plates in steam space: Material **Steel** Thickness **29/32"**

Pitch of stays **18" x 19 1/2"** How are stays secured **D nuts** Working pressure by rules **105** Material of stays **Steel** Area at smallest part **4.3 sq in**

Area supported by each stay **315 sq in** Working pressure by rules **136** Material of Front plates at bottom **Steel** Thickness **29/32"** Material of Lower back plate **Steel** Thickness **29/32"** Greatest pitch of stays **12 3/4" x 9"** Working pressure of plate by rules **232** Diameter of tubes **3"**

Pitch of tubes **4" x 4 1/2"** Material of tube plates **Steel** Thickness: Front **29/32"** Back **5/8"** Mean pitch of stays **9 5/8"** Pitch across wide water spaces **12 3/4"** Working pressures by rules **150** Girders to Chamber tops: Material **Steel** Depth and thickness of girder at centre **6" x 1 3/4"** Length as per rule **2'-1"** Distance apart **11"** Number and pitch of Stays in each **Two 9"**

Working pressure by rules **152** 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 _____

The foregoing is a correct description,
FOR BLAKE BOILER, WAGON &
ENGINEERING CO. LIMITED, Manufacturer
J. Peacock & Son
MANAGING DIRECTOR

Dates of Survey } During progress of work in shops - - } **1907: May 27 June 6. 20. 26. 27 July 2. 4**
while building } During erection on board vessel - - - }

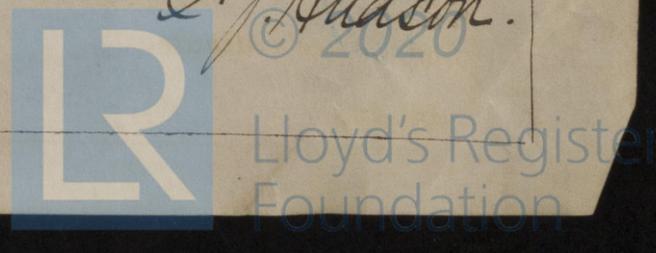
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. **This boiler has been constructed under special survey, the material and workmanship are good and efficient, and when tested with hydraulic pressure was found tight and satisfactory. This boiler has now been efficiently fitted on board.**

Survey Fee £ : : } When applied for, 19.....
Travelling Expenses (if any) £ : : } When received, 19.....

R. D. Philston & Son
Engineer Surveyors to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

Assigned **TUES. 3 SEP 1907**
20 minute on Hpl. R.H.
10 13336



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