

# REPORT ON BOILERS.

No. 15456

28 JUL 1927 17 SEP 1927

Received at London Office

Date of writing Report *27.7.27* When handed in at Local Office *27.7.27* Port of *Grimby*  
 No. in Survey held at *LINCOLN* Date, First Survey *28th March* Last Survey *15th July 1927*  
 Reg. Book. on the *Donkey Boilers for The Rhyckswold S. B. Co's Yard* (Number of Visits *10*) Gross Tons }  
 Master Built at *Glasgow* By whom built *PACIFIC RELIANCE* No. *14* Net Tons }  
 Engines made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_  
 Boilers made at *Lincoln* By whom made *Babcock & Wilcox Ltd.* When made *1927 - July*  
 Registered Horse Power \_\_\_\_\_ Owners \_\_\_\_\_ Port belonging to *London*

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Park Gate I & S. Co.*

Letter for record \_\_\_\_\_ Total Heating Surface of Boilers *400 sq. Ft.* Is forced draft fitted *no* No. and Description of Boilers *One, Clarkson Type* Working Pressure *100 lbs* Tested by hydraulic pressure to *200 lbs* Date of test *24-5-27*

No. of Certificate *213* Can each boiler be worked separately  Area of fire grate in each boiler *Oil Fired* No. and Description of safety valves to each boiler *One 2" Double Lifting* Area of each valve *3.14 sq. ft.* Pressure to which they are adjusted *not adjusted*

Are 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 \_\_\_\_\_ Mean dia. of boilers *5'-0"* Length *8'-7 3/8"*

Material of shell plates *M.S.* Thickness *7/16"* Range of tensile strength *28/32 Ton* Are the shell plates welded or flanged *NO*

Descrip. of riveting: cir. seams *Single Lap* long. seams *Double Butt* Diameter of rivet holes in long. seams *13/16"* Pitch of rivets *3" Long. 2 1/4" Circ.*  
 Lap of plates or width of butt straps *9 1/2"* Per centages of strength of longitudinal joint rivets *122%* Working pressure of shell by rules *148 lbs* Size of *handhole* in shell *6" x 4"* Size of compensating ring *2 1/2 x 3/8"* No. and Description of Furnaces in each boiler *One Oil Fired*

Material *MS* Outside diameter *49 3/8"* Length of plain part *88 1/4"* Thickness of plates crown *13/16"* bottom *1/16"*  
 Description of longitudinal joint \_\_\_\_\_ No. of strengthening rings  Working pressure of furnace by the rules  Combustion chamber plates: Material *MS* Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_ Pitch of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_

Top \_\_\_\_\_ If stays are fitted with nuts or riveted heads \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of stays \_\_\_\_\_ Area at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ End plates in steam space: Material *MS* Thickness *5/8"*

Pitch of stays \_\_\_\_\_ How are stays secured \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of stays \_\_\_\_\_ Area at smallest part \_\_\_\_\_

Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of Front plates at bottom \_\_\_\_\_ Thickness \_\_\_\_\_ Material of Lower back plate \_\_\_\_\_ Thickness \_\_\_\_\_ Greatest pitch of stays \_\_\_\_\_ Working pressure of plate by rules \_\_\_\_\_ Diameter of tubes *3 1/4"*

Pitch of tubes *7" Long* Material of tube plates *MS* Thickness: Front \_\_\_\_\_ Back \_\_\_\_\_ Mean pitch of stays \_\_\_\_\_ Pitch across wide water spaces \_\_\_\_\_ Working pressures by rules \_\_\_\_\_ Girders to Chamber tops: Material \_\_\_\_\_ Depth and thickness of girder at centre \_\_\_\_\_ Length as per rule \_\_\_\_\_ Distance apart \_\_\_\_\_ Number and pitch of Stays in each \_\_\_\_\_

Working pressure by rules \_\_\_\_\_ Steam dome: description of joint to shell \_\_\_\_\_ % of strength of joint \_\_\_\_\_

Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_

Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_

UPPERHEATER. Type \_\_\_\_\_ Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_

Date of Test \_\_\_\_\_ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler \_\_\_\_\_

Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

*(Annual Request)*

The foregoing is a correct description,  
*Prof. Babcock & Wilcox Ltd.* Manufacturer.

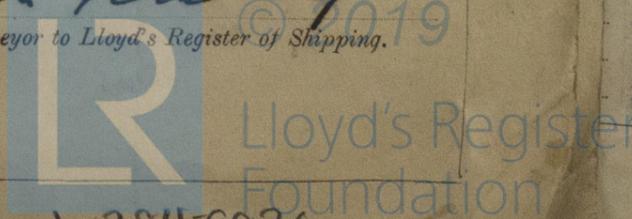
Dates of Survey } During progress of *1927: Mar 28, Apr 1, 12, May 5, 12, Jun 21, 28, July 15* Is the approved plan of boiler forwarded herewith *no* *books manager*  
 while building } During erection on board vessel - - - } Total No. of visits *10*

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) *This Donkey Boiler has been built under special survey and in accordance with the approved plans. The materials and workmanship are good & the case is eligible for notation when fitted in a closed vessel.*

Survey Fee ... .. £ *4:4* When applied for, *16/6*  
 Travelling Expenses (if any) £ *3:5* When received, *1/9/27*

Committee's Minute **TUES. 20 SEP 1927**  
 Assigned *See G.L.S. rpt No. 47018*

*W. H. Kinlay*  
Engineer Surveyor to Lloyd's Register of Shipping.



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