



VERTICAL DONKEY BOILER— Manufacturers of Steel

No. \_\_\_\_\_ Description \_\_\_\_\_

Made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_

Working pressure tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_ Fire grate area \_\_\_\_\_ Description of Safety \_\_\_\_\_

Valves \_\_\_\_\_ No. of Safety Valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Date of adjustment \_\_\_\_\_

If fitted with easing gear \_\_\_\_\_ If steam from main boilers can enter the donkey boiler \_\_\_\_\_ Dia. of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_

Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Descrip. of riveting long. seams \_\_\_\_\_

Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plating \_\_\_\_\_ Per centage of strength of joint \_\_\_\_\_ Rivets \_\_\_\_\_ Plates \_\_\_\_\_

Working pressure of shell by rules \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_ Radius of do. \_\_\_\_\_ No. of stays to do. \_\_\_\_\_ Dia. of stays \_\_\_\_\_

Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_ Thickness of furnace plates \_\_\_\_\_ Description of joint \_\_\_\_\_

Working pressure of furnace by rules \_\_\_\_\_ Thickness of furnace crown plates \_\_\_\_\_ Stayed by \_\_\_\_\_

Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_ Thickness of water tubes \_\_\_\_\_ Dates of survey \_\_\_\_\_

SPARE GEAR. State the articles supplied:— *Two top and bottom end bolts & nuts, two main bearing bolts, one set of coupling bolts, one set of feed and bilge pump valves, half set air & live pump valves, one safety valve spring, assorted iron bolts & nuts*

The foregoing is a correct description,

FOR RICHARDSONS, WESTGARTH & CO., LTD

Manufacturer.

*Nedric H. Russell*  
ASSISTANT MANAGER

Dates of Survey while building

During progress of work in shops - -	1911 Mar 20. 29	May 16. 30	June 1. 7	July 7. 11. 17	Aug. 3. 10. 18. 28
	During erection on board vessel - -				
	Sep 1. 6. 14. 20. 25. 26.	Oct. 2. 3. 5. 6. 7. 12. 16			

Total No. of visits \_\_\_\_\_ 26 \_\_\_\_\_ Is the approved plan of main boiler forwarded herewith \_\_\_\_\_

Dates of Examination of principal parts—Cylinders 30. 5. 11 Slides 7. 6. 11 Covers 28. 8. 11 Pistons 28. 8. 11 Rods 28. 8. 11

Connecting rods 14. 9. 11 Crank shaft 20. 9. 1911 Thrust shaft 20. 9. 1911 Tunnel shafts 20. 9. 11 Screw shaft 5. 10. 11 Propeller 5. 10. 11

Stern tube 5. 10. 11 Steam pipes tested 7. 10. 11. Engine and boiler seatings 6. 10. 11 Engines holding down bolts 6. 10. 11

Completion of pumping arrangements 6/11/11 Boilers fixed 6. 10. 11. Engines tried under steam 12. 10. 11

Main boiler safety valves adjusted 12. 10. 11. Thickness of adjusting washers P.Br. p 7/32" s 5/16" C.Br. p 3/8" s 5/16" S.Br. p 3/8" s 5/16"

Material of Crank shaft *Steel* Identification Mark on Do. 5047 AB Material of Thrust shaft *Steel* Identification Mark on Do. 7056 LM

Material of Tunnel shafts *Steel* Identification Marks on Do. 6714. 6 + 7 Material of Screw shafts *Steel* Identification Marks on Do. 373 + 4 LB

Material of Steam Pipes *Copper* Test pressure 400 US.

General Remarks (State quality of workmanship, opinions as to class, &c. *Machinery and boilers built under Special Survey. Materials and workmanship good. Engines and boilers examined under full steam at engine works and found satisfactory.*

*It is submitted that this vessel is eligible for the record of L.M.C with date on completion*

It is submitted that this vessel is eligible for THE RECORD + LMC 10. 11.

*JWR*  
28/12/11

The amount of Entry Fee . . . £ 3 : - : When applied for, \_\_\_\_\_

Special . . . £ 38 . 12 : . . . 31. 10. 11

Donkey Boiler Fee . . . £ : : When received, \_\_\_\_\_

Travelling Expenses (if any) £ : : as per letter from London 27. 11. 1911

*J. G. Findlay & Cropper*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute FRI. DEC. 29. 1911

Assigned *Thurs 10. 11*



MACHINERY CERTIFICATE  
ISSUED

Certificate (if required) to be sent to \_\_\_\_\_