

REPORT ON MACHINERY.

No. 13692

Port of Greenock

RECEIVED 6 AUG 1903

Received at London Office 10

No. in Survey held at Greenock Date, first Survey 27th June Last Survey 29th June 1903

Reg. Book. on the Ship 'Alacrita' (Number of Visits 2)

Master Built at Port Glasgow By whom built A. Rodger & Co Tons ^{Gross} _{Net} When built 1902

Engines made at By whom made when made

Boilers made at Barhead By whom made Wallace & Co when made 1902

Registered Horse Power Owners Port belonging to

Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted Is Electric Light fitted

ENGINES, &c.—Description of Engines

No. of Cylinders No. of Cranks

Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft ^{as per rule} _{as fitted} Material of screw shaft

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight

Is the propeller boss If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two

cranks are fitted, is the shaft lapped or protected between the liners Length of stern bush

Dia. of Tunnel shaft ^{as per rule} _{as fitted} Dia. of Crank shaft journals ^{as per rule} _{as fitted} Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under

rollers Dia. of screw Pitch of screw No. of blades State whether moveable Total surface

No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room In Holds, &c.

No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the discharge pipes above or below the deep water line

Are they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate

That pipes are carried through the bunkers How are they protected

Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges

When were stern tube, propeller, screw shaft, and all connections examined in dry dock Is the screw shaft tunnel watertight

Is it fitted with a watertight door worked from

BOILERS, &c.—

(Letter for record) Total Heating Surface of Boilers Is forced draft fitted

No. and Description of Boilers Working Pressure Tested by hydraulic pressure to

Date of test Can each boiler be worked separately Area of fire grate in each boiler No. and Description of safety valves to

each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are they welded or flanged Descrip. of riveting: cir. seams long. seams

Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Percentages of strength of longitudinal joint ^{rivets} Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part ^{top} _{bottom} Thickness of plates ^{crown} _{bottom} Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material 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 Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Diameter 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 Pitch of tubes Material of tube plates 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

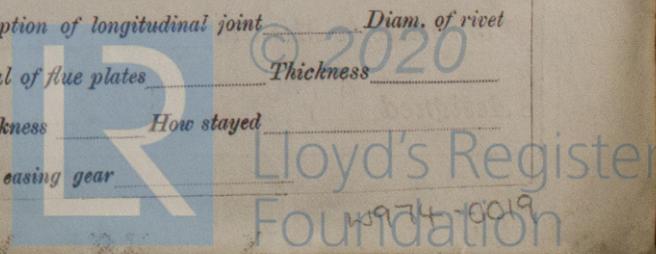
Working pressure by rules Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

plates Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

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



DONKEY BOILER— No. *1* Description *Vertical with cross tube*
 Made at *Barrhead* By whom made *J. Wallace & Co* When made *29/12/02* Where fixed *on Deck*
 Working pressure *80 lbs* tested by hydraulic pressure to *160 lbs* No. of Certificate *6539* Fire grate area *16 sq ft* Description of safety valve *Direct Spring*
 No. of safety valves *1* Area of each *4.9 sq ft* Pressure to which they are adjusted *80 lbs* If fitted with easing gear *Yes* If steam from main boilers can enter the donkey boiler *✓*
 Dia. of donkey boiler *4' 6"* Length *8' 6"* Material of shell plates *Steel* Thickness *3/8"* Range of tensile strength *27 tons* Descrip. of riveting long. seams *Lap down middle* Dia. of rivet holes *3/16"* Whether punched or drilled *Drilled* Pitch of rivets *3"*
 Lap of plating *4' 8"* Per centage of strength of joint *75%* Rivets *75* Thickness of shell crown plates *7/16"* Radius of do. *5 ft* No. of Stays to do. *none*
 Dia. of stays *✓* Diameter of furnace Top *46"* Bottom *48"* Length of furnace *50"* Thickness of furnace plates *15/32"* Description of joint *Weld* Thickness of furnace crown plates *19/32"* Stayed by *✓* Working pressure of shell by rules *105 lbs*
 Working pressure of furnace by rules *95 lbs* Diameter of uptake *18"* Thickness of uptake plates *3/8"* Thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
 Manufacturer.

Dates of Survey while building
 During progress of work in shops - - *1902 June 27. 29.*
 During erection on board vessel - - *2.*
 Total No. of *s* *2.*
 Is the approved plan of main boiler forwarded herewith
 " " " donkey " " "

General Remarks (State quality of workmanship, opinions as to class, &c.)

This Boiler has been fitted on board and examined under steam when its safety valve was adjusted to the working pressure above mentioned. It is now in good and efficient condition and eligible in my opinion to have the record & D.B. 7.03 marked in the Society's Register Book.

It is submitted that this vessel is eligible for THE RECORD. - D.B. 7.03. Working pressure 80 lbs
Bel
6.8.03

Certificate (if required) to be sent to

The amount of Entry Fee..	£	:	:	When applied for,
Special	£	:	:19.....
Donkey Boiler Fee .. .	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:19.....

Wm. Austin.
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute *Glasgow 5-AUG1903*

Assigned *- D.B. 7.03*

