

Received at London Office SAT. AUG. 10. 1912

Date of writing Report 9-8-12 When handed in at Local Office 9-8-12 Port of Hull
 No. in Survey held at Hull & Selby Date, First Survey Jul 1 Last Survey 3-7-12 19
 Reg. Book. 19 (Number of Visits 5)
 Master Steel screw steamer Balsende Tons } Gross 42
 Built at Selby By whom built Cochrane & Sons Net 21
 Engines made at Yarmouth By whom made Crabtree & Co when made 1912-7
 Boilers made at Stockton By whom made Riley Bros. when made 1912-7
 Registered Horse Power no Algave Owners Companhia de Pescarias Balsende Port belonging to Tavira
 Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines See London report No. of Cylinders ✓ No. of Cranks ✓
 Dia. of Cylinders ✓ Length of Stroke ✓ Revs. per minute ✓ Dia. of Screw shaft as per rule 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 in 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 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush ✓
 Dia. of Tunnel shaft as per rule Dia. of Crank shaft journals as per rule Dia. of Crank pin ✓ Size of Crank webs ✓ Dia. of thrust shaft under collars ✓
 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 one & 2' ejector Sizes of Pumps ✓ No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room one 2" & 2' ejector In Holds, &c. 1 2" in each compartment
 & 2' ejector to Fish Hold
 No. of Bilge Injections one sizes 2 1/2" Connected to condenser to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes 2"
 Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible none
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both
 Are they sized sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
 What pipes are carried through the bunkers none How are they protected ✓
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes
 Dates of examination of completion of fitting of Sea Connections 1-7-12 of Stern Tube 1-7-12 Screw shaft and Propeller 1-7-12
 Is the Screw Shaft Tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.—(Letter for record ✓) Manufacturers of Steel ✓
 Total Heating Surface of Boilers ✓ Is Forced Draft fitted no No. and Description of Boilers one single ended
 Working Pressure 130 lbs Tested by hydraulic pressure to 260 Date of test 27-6-12 No. of Certificate 4901
 Can each boiler be worked separately ✓ Area of fire grate in each boiler ✓ 26 sq No. and Description of Safety Valves to each boiler two spring loaded Area of each valve 3.14 Pressure to which they are adjusted 135 Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 6" boiler lagging Mean dia. of boilers ✓ Length ✓ Material of shell plates ✓
 Thickness ✓ Range of tensile strength ✓ Are the shell plates 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 ✓
 Per centages of strength of longitudinal joint ✓ 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 ✓ Thickness of plates ✓ 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 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 ✓

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
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
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	Radius of do.	Stayed by	
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey	

SPARE GEAR. State the articles supplied:— Two top end bolts, two bottom end bolts, two main bearing bolts, one set of coupling bolts, one set of pump valves, one main & one donkey check valve, one propeller & a quantity of iron & bolts & nuts assorted.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building: During progress of work in shops - - 1912 July 1. 15. 29. 30. 31
 During erection on board vessel - - - 5
 Total No. of visits 5

Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods

Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller

Stern tube Steam pipes tested 15 & 30 - 7-12 Engine and boiler seatings 1-7-12 Engines holding down bolts 31-7-12

Completion of pumping arrangements 31-7-12 Boilers fixed 31-7-12 Engines tried under steam 31-7-12

Main boiler safety valves adjusted 31-7-12 Thickness of adjusting washers Pat 7/16 Lead 7/16

Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

Material of Steam Pipes Copper (solid drawn) Test pressure 400 lbs.

General Remarks (State quality of workmanship, opinions as to class, &c. These engines & boiler have been fitted on board & properly secured, they have been tried under steam satisfactorily, the safety valves adjusted, tested. In our opinion the vessel is eligible for the record + L.M.C. 7.12.

It is submitted that this vessel is eligible for THE RECORD. + LMC 7.12
 J.S.
 13.8.12 J.M.

Certificate (if required) to be sent to (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £ ✓ : : When applied for, 9.8.12
 Special £ ✓ : :
 Donkey Boiler Fee £ ✓ : :
 Travelling Expenses (if any) £ - : 11-4 : : When received, 16.8.12

Frank A. Sturgeon & John W. Gwynne
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute
 Assigned
 TUE. AUG. 13. 1912
 Thms 7.12

