

REPORT ON MACHINERY.

No. 35272

Received at London Office

WED. JUL. 21 1924

Date of writing Report 30-6-1924 When handed in at Local Office

30/6/1924 Port of Hull

No. in Survey held at Hull

Date, First Survey 31-5-23 Last Survey 20-6-1924

Reg. Book. on the S.S. "BLUE GALLEON"

(Number of Visits 27)

Gross 712.15 Tons Net 337.07

Master Built at Selby By whom built Cochrane & Sons Ltd.

When built 1924

Engines made at Hull By whom made Amos & Smith Ltd. (No 3499) when made 1924

Boilers made at Hull By whom made Amos & Smith Ltd. (-do-) when made 1924

Registered Horse Power Owners Gallen Shipping Co. Ltd. Port belonging to Newcastle.

Nom. Horse Power as per Section 28 104 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no.

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 14 1/2 - 24 - 40 Length of Stroke 27 Revs. per minute 94 Dia. of Screw shaft 8 3/4 Material of screw shaft steel.

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

in the propeller boss yes 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 35

Dia. of Tunnel shaft 7 3/4 Dia. of Crank shaft journals 7 3/4 Dia. of Crank pin 7 3/4 Size of Crank webs 15 x 4 3/4 Dia. of thrust shaft under

collars 7 3/4 Dia. of screw 11-0 Pitch of Screw 12-0 No. of Blades 4 State whether moveable no Total surface 36 sq ft

No. of Feed pumps 2 Diameter of ditto 2 1/2 Stroke 18 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2 Stroke 18 Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 6 1/4 x 4 3/4 x 6; 6 x 6 x 6. No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two 2 1/2, one fore & one aft. In Holds, &c. Two 2 1/2, one port & one starboard.

No. of Bilge Injections 1 sizes 3 1/2 Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size yes, 2 1/2.

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

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

Are they fixed 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 hold suction How are they protected wood casings.

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

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel John Spencer & Sons, Ltd. ISB.

Total Heating Surface of Boilers 1800 Is Forced Draft fitted no No. and Description of Boilers one single ended main

Working Pressure 180 Tested by hydraulic pressure to 320 lbs. Date of test 13-2-24 No. of Certificate 3518.

Can each boiler be worked separately Area of fire grate in each boiler 51.25 No. and Description of Safety Valves to

each boiler 2 spring loaded Area of each valve 5.939 sq ft Pressure to which they are adjusted 180 lbs. Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork alt. 2'-0" Mean dia. of boilers 14'-0" Length 11'-0" Material of shell plates S.

Thickness 1 5/32 Range of tensile strength 28/32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.R.

long. seams TRDBS. Diameter of rivet holes in long. seams 1 3/16. Pitch of rivets 8 1/8 Lap of plates or width of butt straps 17 1/2

Per centages of strength of longitudinal joint rivets 88.8 Working pressure of shell by rules 182 Size of manhole in shell 16 x 12.

Size of compensating ring 40 x 30 x 1 3/32 No. and Description of Furnaces in each boiler 3 plain Material S Outside diameter 42 7/8

Length of plain part top 84 bottom 78 1/2 Thickness of plates crown 13 bottom 16 Description of longitudinal joint welded. No. of strengthening rings

Working pressure of furnace by the rules 195 Combustion chamber plates: Material S Thickness: Sides 11/16 Back 21/32 Top 11/16 Bottom 7/8

Pitch of stays to ditto: Sides 9 x 9 1/2 Back 9 x 9 Top 9 1/2 x 9 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 183.5

Material of stays S Area at smallest part 1 3/4 Area supported by each stay 81 sq ft Working pressure by rules 187 End plates in steam space:

Material S Thickness 1" Pitch of stays 18 1/4 x 14 1/2 How are stays secured D.N. & W. Working pressure by rules 192 Material of stays S

Area at smallest part 2 3/4 Area supported by each stay 260 sq ft Working pressure by rules 212 Material of Front plates at bottom S.

Thickness 7/8 Material of Lower back plate S Thickness 7/8 Greatest pitch of stays 14 x 9 1/8 Working pressure of plate by rules 224

Diameter of tubes 3 1/2 Pitch of tubes 4 3/4 x 4 3/4 Material of tube plates S Thickness: Front 2/8 Back 27/32 Mean pitch of stays 9 1/2 x 11 1/8

Pitch across wide water spaces 14 Working pressures by rules 183.5 Girders to Chamber tops: Material S Depth and

thickness of girder at centre 9 x 1 1/2 Length as per rule 2'-9 1/2 Distance apart 9 1/2 Number and pitch of stays in each 2 @ 9 1/2

Working pressure by rules 210 Steam dome: description of joint to shell % of strength of joint

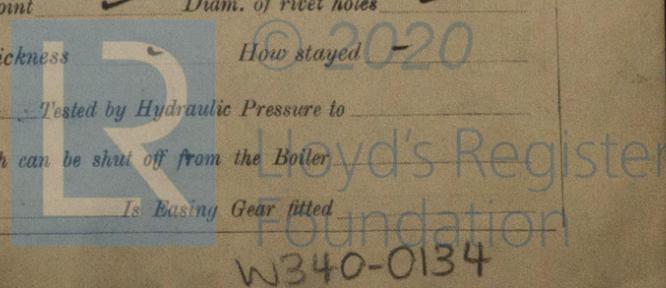
Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

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

SUPERHEATER. 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



IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:-

Two top end bolts & nuts, 2 bottom end bolts & nuts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of air, feed, & bilge pump valves, a quantity of assorted bolts & nuts, and iron of various sizes.

The foregoing is a correct description

FOR AMOS & SMITH LTD.

S. J. Robinson

SECRETARY.

Manufacturer.

Dates of Survey while building: During progress of work in shops - 1923:- May 31, Jun 19, Jul 9, Aug 10, 14, 23, Oct 12, 29, Nov 7, 26, Dec 10, 19. During erection on board vessel - 1924:- Jan 10, 15, 17, 30, Feb 10, 21, Mar 12, Apr 2, May 31, Jun 7, 4, 5, 12, 17, 20. Total No. of visits 27

Is the approved plan of main boiler forwarded herewith yes

Dates of Examination of principal parts - Cylinders 29-10-23 Slides 26-11-24 Covers 29-10-23 Pistons 19-12-23 Rods 19-12-23. Connecting rods 19-12-23 Crank shaft 19-12-23 Thrust shaft 19-12-23 Tunnel shafts Screw shaft 19-12-23 Propeller 2-4-24. Stern tube 2-4-24 Steam pipes tested 4-6-24 Engine and boiler seatings 31-5-24 Engines holding down bolts 12-6-24. Completion of pumping arrangements 20-6-24 Boilers fixed 12-6-24 Engines tried under steam 17-6-24. Completion of fitting sea connections 15-4-24 Stern tube 15-4-24 Screw shaft and propeller 15-4-24. Main boiler safety valves adjusted 17-6-24 Thickness of adjusting washers P 3/32 S 1/32. Material of Crank shaft Steel Identification Mark on Do. 22 PF. Material of Thrust shaft Steel Identification Mark on Do. 23 PF. Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Steel Identification Marks on Do. 24 PF. Material of Steam Pipes S.D. Copper. Test pressure 400 lbs per sq in.

Is an installation fitted for burning oil fuel no Is the flash point of the oil to be used over 150°F. Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case no If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The engines and boiler of this vessel have been built under special survey, and the materials and workmanship are good. The machinery has been properly fitted and secured on board the steamer "Blue Galleon". The steam and feed pipes have been tested as required by the Rules, and the safety valves adjusted under steam and tested for accumulation. On completion the machinery was tried under working conditions and found satisfactory. The machinery is now in a good and efficient condition, and eligible in my opinion to have the record + LMC 6.24 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 6.24. CL.

Handwritten signatures and date 3/7/24

The amount of Entry Fee ... £ 3 : 0 : Special ... £ 26 : - : Donkey Boiler Fee ... £ : : Travelling Expenses (if any) £ : :

P. Fitzgerald, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 4 JUL 1924 Assigned + Lmc 6,24

