

REPORT ON MACHINERY.

No. 34386

Received at London Office WED. 9-JAN. 1918

Date of writing Report 2-1-18 When handed in at Local Office

Port of Glasgow

No. in Survey held at Glasgow
Reg. Book.

Date, First Survey 17th Nov. 1915 Last Survey 5-1-1917

on the Machinery for the Single Screw Steamer "PHILOTIS" (Number of Vessels) 2760 Gross Tons

Master Built at Ardrossan By whom built Ardrossan 8. B. Co. 269 When built 1918.

Engines made at Boatbridge By whom made W. Beardmore, Co. 441 when made 1918.

Boilers made at Glasgow By whom made A. W. Dalglisch 699/400. when made 1918.

Registered Horse Power Owners J. P. Hutchison Port belonging to Glasgow

Nom. Horse Power as per Section 28 143 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

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

Dia. of Cylinders 16, 26, 44 Length of Stroke 33 Revs. per minute 92 Dia. of Screw shaft as per rule 9.6 Material of screw shaft Iron

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 Yes If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 3-6

Dia. of Tunnel shaft as per rule 9.6 Dia. of Crank shaft journals as per rule 8.83 Dia. of Crank pin 9 Size of Crank webs 16 1/2 x 6 Dia. of thrust shaft under

collars 9 1/4 Dia. of screw 11-8 Pitch of Screw 14-9 No. of Blades 4 State whether moveable No Total surface 50 f

No. of Feed pumps 2 Diameter of ditto 3 Stroke 16 1/2 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 3 Stroke 16 1/2 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 3 Sizes of Pumps 4 1/2 x 6 x 10 Duplex No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 3 - 2 1/4 6 Centrifugal Pumps, &c. 2 - 2 1/2

No. of Bilge Injections 1 sizes 4 Connected to condenser, or to circulating pump 6 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 No

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

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 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 and of Stern Tube and Screw shaft and Propeller 28-9-14

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

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel

Total Heating Surface of Boilers 2456 f Is Forced Draft fitted No No. and Description of Boilers 2 Single ended marine

Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 9-11-14 No. of Certificate 13946

Can each boiler be worked separately Yes Area of fire grate in each boiler 30 f No. and Description of Safety Valves to

each boiler 1 Pair Spring loaded Area of each valve 3.940 Pressure to which they are adjusted 185 Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 15 Mean dia. of boilers 18-0 Length 10-0 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 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 plate part top Thickness of plates crown 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 Are stays 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 Are stays 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 pressure 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

IS A DONKEY BOILER FITTED?

Yes

If so, is a report now forwarded?

-

SPARE GEAR. State the articles supplied:-

Two connecting rods & 2 low Rod bottom end bolts & nuts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of feed & brge pump valves. A quantity of assorted bolts & nuts, Iron of various sizes

The foregoing is a correct description,

WILLIAM BEARDMORE & CO., LIMITED.

Manufacturers.

per R Sneddon

Dates of Survey while building { During progress of work in shops - 1915 Nov. 17, 29. Dec. 15, 16 Jan. 13, 18, 26, 31 Feb. 9, 18 Mar. 8, Apr. 12 May 3, 25 June 5, 13, 20, 26 July 13, 20 Aug. 22. During erection on board vessel - Oct. 4, Nov. 2, 1914 Apr. 11, June 1, 4, 15, 28 July 7, 26, 31 Aug. 13, 23 Sep. 3, 6, 10, 11, 18, 24, 28 Oct. 5, 12, 15 Nov. 13, 19, 23, 28 Total No. of visits Dec. 3, 4, 5, 10, 11, 13, 14, 18, 20, 21, 22, 24, 31, 1914 Jan. 5 - 60 Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts - Cylinders 5-10-14 Slides 5-10-14 Covers 5-10-14 Pistons 24-9-14 Rods 24-9-14 Connecting rods 24-9-14 Crank shaft 13-8-14 Thrust shaft 18-9-14 Tunnel shafts None Screw shaft 18-9-14 Propeller 18-9-14 Stern tube 18-9-14 Steam pipes tested 10-12-14 Engine and boiler seatings 19-11-14 Engines holding down bolts 11-12-14 Completion of pumping arrangements 11-12-14 Boilers fixed 11-12-14 Engines tried under steam 31-12-14 Main boiler safety valves adjusted 21-12-14 Thickness of adjusting washers 5/16 - 5/16 - 3/8 - 5/16

Material of Crank shaft S Identification Mark on Do. 4115 13-8-14 8.2.8. Material of Thrust shaft S Identification Mark on Do. 1546 18-9-14 8.4.8.

Material of Tunnel shafts None Identification Marks on Do. Material of Screw shafts Iron Identification Marks on Do. 4115 18-9-14 8.2.8.

Material of Steam Pipes Copper Test pressure 360 lbs

Is an installation fitted for burning oil fuel Yes 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 Yes If so, state name of vessel S. S. 'SMERDIS' (Beardmore 441)

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

The Machinery has been built under Special Survey in accordance with the Rules of the Society & has been securely fitted on board & tried under steam with satisfactory results.

The Machinery is eligible, in my opinion, to have notation T.L.M.C. 1-18.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 1-18.

The amount of Entry Fee ... £ 2 : 0 : 0 When applied for,

Special ... £ 21 : 9 : 0 8/1/1918

Donkey Boiler Fee ... £ 1 : 5 : 0 When received,

Travelling Expenses (if any) £ 1 : 5 : 0 9-3-18 11-3-18

Committee's Minute GLASGOW 8-JAN-1918

Assigned T.L.M.C. 1-18

MACHINERY CERTIFICATE WRITTEN 3-18

Fixed A. Ferguson Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



© 2020

Lloyd's Register Foundation