

REPORT ON MACHINERY.

No. 17229

Received at London Office

Date of writing Report 7th Dec 1917 When handed in at Local Office 22nd Dec 1917 Port of Greenwich REC. 28 1917
 No. in Survey held at Greenwich Date, First Survey 4th Sep. 1916 Last Survey 17th Dec 1917
 Reg. Book. on the Old Man R.F.A. Prestol. (Number of Visits) 133 Tons { Gross 2629
 Net 993

Master Capey Built at Old Kelpahuch By whom built Kapier & Miller When built 1917
 Engines made at Greenwich By whom made John S Kincaid & Co when made 1917
 Boilers made at Greenwich By whom made John S Kincaid & Co when made 1917
 Registered Horse Power _____ Owners British Admiralty Port belonging to London
 Nom. Horse Power as per Section 28 471 ⁵⁵⁷ Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Compound No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 26-42 1/2 Length of Stroke 45 Revs. per minute 100 Dia. of Screw shaft 1 1/4 as per rule 1 1/4 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 no 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 no If two
 liners are fitted, is the shaft lapped or protected between the liners _____ Length of stern bush 61 7/16
 Dia. of Tunnel shaft 1 1/2 as per rule 1 1/2 Dia. of Crank shaft journals 1 1/2 as per rule 1 1/2 Dia. of Crank pin 1 1/4 Size of Crank webs 27 1/2 x 9 1/4 Dia. of thrust shaft under
 collars 1 1/4 Dia. of screw 1 1/2 Pitch of Screw 16:0 No. of Blades 4 State whether moveable no Total surface 77 sq ft

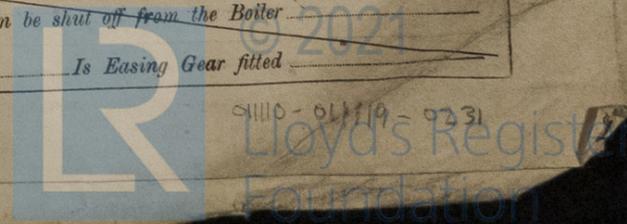
No. of Feed pumps 2 Diameter of ditto 12 Stroke 21 Can one be overhauled while the other is at work yes
 No. of Bilge pumps 1 Diameter of ditto 8 Stroke 12 Can one be overhauled while the other is at work no
 No. of Donkey Engines 1 Sizes of Pumps 11 & 12 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 7 1/2 3 1/2 In Holds, &c. Three 4 inch from pump & from Girth Lifting 3
 Circulating Pump 1 1/2 diam 1 1/2 diam 1 1/2 diam 1 1/2 diam 20 x 15
 No. of Bilge Injections 1 sizes 1 1/2 1 1/2 Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes 3 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 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 below
 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 no
 What 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 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 yes Is it fitted with a watertight door _____ worked from _____

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Coburn & Sons Newcastle
 Total Heating Surface of Boilers 8754 sq ft Is Forced Draft fitted yes No. and Description of Boilers Three long ended
 Working Pressure 200 lb Tested by hydraulic pressure to 400 lb Date of test 4/10/17 No. of Certificate 1310
 Can each boiler be worked separately yes Area of fire grate in each boiler oil burning No. and Description of Safety Valves to
 each boiler Two opening Area of each valve 11-09 Pressure to which they are adjusted 205 lb Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 27 Mean dia. of boilers 15:9 Length 11:9 Material of shell plates Steel
 Thickness 1 1/8 Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams _____
 long. seams all up 3/4 Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 10 1/2 Lap of plates or width of butt straps 2 1/2
 Per centages of strength of longitudinal joint _____ rivets 88.65 Working pressure of shell by rules 232 lb Size of manhole in shell 16 x 12
 Size of compensating ring ring 1 1/8 No. and Description of Furnaces in each boiler 3 main Material Steel Outside diameter 50 1/2
 Length of plain part _____ Thickness of plates _____ crown _____ bottom _____ Description of longitudinal joint beaded No. of strengthening rings each
 Working pressure of furnace by the rules 226 lb Combustion chamber plates: Material Steel Thickness: Sides 1 1/16 Back 1 1/16 Top 1 1/16 Bottom 1 1/16
 Pitch of stays to ditto: Sides 9:8 5/8 Back 8 7/8 Top 9:8 5/8 If stays are fitted with nuts or riveted heads no Working pressure by rules 211 lb

Material of stays Steel Area at smallest part 2.08 Area supported by each stay 77.75 Working pressure by rules 235 lb End plates in steam space:
 Material Steel Thickness 1 1/16 Pitch of stays 21:1:20 1/2 How are stays secured all nut Working pressure by rules 205 lb Material of stays Steel
 Area at smallest part 9.82 Area supported by each stay 486 Working pressure by rules 235 lb Material of Front plates at bottom Steel
 Thickness 1 Material of Lower back plate Steel Thickness 1 1/16 Greatest pitch of stays 13 1/2 Working pressure of plate by rules 204 lb
 Diameter of tubes 2 1/2 Pitch of tubes 3 1/16 Material of tube plates Steel Thickness: Front 1 Back 2 3/16 Mean pitch of stays 9 1/2
 Pitch across wide water spaces 13 Working pressures by rules 212 lb Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 9:1 5/8 Length as per rule 22.52 Distance apart 8 5/8 Number and pitch of stays in each 2 in 9
 Working pressure by rules 212 lb 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 _____
 Tested by Hydraulic Pressure to _____

SUPERHEATER. Type _____ Date of Approval of Plan _____
 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?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— The top end bolts, The bottom end bolts, The main bearing bolts, one set coupling bolts, one set feed and ridge pump valves, one set of the main bearing bushes, one eccentric rod & clips complete, one piston with clips complete, one third crank clip, one slide rod complete, the propeller is as per specification

The foregoing is a correct description, FOR JOHN G. KINCAID & COY., LIMITED.

Robert Greer

Manufacturer.

Dates of Survey while building: During progress of work in shops - (1916) Sep. 4-13-18-20-25-27, Oct. 4-6-13-17-20, Nov. 1-10-14-17-21-25-27-29, Dec. 1-8-13-20-22-26-29 (1917) Jan. 7-10-12-16-17-19-22-26-29-31, Feb. 1-5-8-13-16-20-22-23-28, During erection on board vessel - 2-5-9-12-14-23-26-28-29-30, Apr. 2-4-6-10-12-16-18-24-26-27-30, May 2-4-8-11-14-15-17-21-24-28-31, Jun. 4-5-6-11-14-18-21-22-25, July 2-18-20-23-26-30, Aug. 3-7-13-14-21-23-28-30, Sep. 3-5-15-22-27, Oct. 1-4-7-10-13-17-24-30, Nov. 1-2-7-14-19-22-28-30, Dec. 3-4-5-6-7-10-11-14-17, Total No. of visits 133.

Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders 14/6/17 Slides 5/9/17 Covers 14/6/17 Pistons 5/9/17 Rods 21/6/17 Connecting rods 3/5/17 Crank shaft 14/6/17 Thrust shaft 5/9/17 Tunnel shafts 17/10/17 Screw shaft 23/8/17 Propeller 23/8/17 Stern tube 2/7/17 Steam pipes tested 19/11/17 & 10/2/17 Engine and boiler seatings 1/9/17 Engines holding down bolts 5/12/17 Completion of pumping arrangements 1/12/17 Boilers fixed 5/12/17 Engines tried under steam 1/12/17 Completion of fitting sea connections 1-9-17 Stern tube 1-9-17 Screw shaft and propeller 1-9-17 Main boiler safety valves adjusted 1/12/17 Thickness of adjusting washers 2 3/16 x 5 7/16 - 2 9/16 x 5 9/16 - 2 5/16 x 5 13/16.

Material of Crank shaft I Steel Identification Mark on Do. 2388 Material of Thrust shaft I Steel Identification Mark on Do. 2388 Material of Tunnel shafts I Steel Identification Marks on Do. 2388 Material of Screw shafts I Steel Identification Marks on Do. 2388 Material of Steam Pipes Steel ✓ Test pressure 600 lb ✓

Is an installation fitted for burning oil fuel Yes ✓ Is the flash point of the oil to be used over 150°F. Yes ✓

Have the requirements of Section 49 of the Rules been complied with Yes ✓

Is this machinery duplicate of a previous case If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. Workmanship good ✓

The machinery and boilers of this steamer have been constructed under special survey, and placed on board in accordance with the Society's rules, they are now in our opinion in safe working condition and the case is respectfully submitted for the ratification of L.M.C. 12-17 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 12.17. F.D. Fitted for oil fuel 12.17. F.P. above 150°F.

Table with columns for fees: The amount of Entry Fee, Special, Donkey Boiler Fee, Travelling Expenses (if any). Includes dates for when applied for and when received.

Signature of James Linnis + Wm. H. Copman, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 27 DEC. 1917.

Assigned + L.M.C. 12.17 F.D.

Fitted for oil fuel 12,17 F.P. above 150°F



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

204 24-12-17