

REPORT ON MACHINERY.

No. 45185

Received at London Office

25 NOV 1925

Date of writing Report 14-11-1925 When handed in at Local Office 23-11-1925 Port of Glasgow
 No. in Survey held at Coatbridge & Glasgow Date, First Survey 22-4-25 Last Survey 12-11-1925
 Reg. Book. 3942 on the S.S. AUDACITY (Number of Visits 28) Tons Gross 589
 Master ✓ Built at Greenock By whom built Geo Brown & Co. (149) When built 1920
 Engines made at Coatbridge By whom made Wm Beardmore & Co. Ltd (620) when made 1925
 Boilers made at Glasgow By whom made Wm Beardmore & Co. Ltd (190) when made 1925
 Registered Horse Power ✓ Owners H.T. Everard & Sons Ltd. Port belonging to London
 Nom. Horse Power as per Section 28 110-103 Is Refrigerating Machinery fitted for cargo purposes h Is Electric Light fitted h

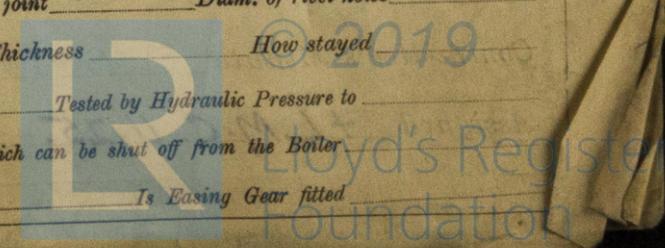
ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 18 1/2", 22", 36" Length of Stroke 24" Revs. per minute ✓ Dia. of Screw shaft 7 1/8" Material of steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube h Is 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 h 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 h If two
 liners are fitted, is the shaft lapped or protected between the liners h Length of stern bush 34"
 Dia. of Tunnel shaft as per rule 6.6" Dia. of Crank shaft journals as per rule 6.52" Dia. of Crank pin 7 1/4" Size of Crank webs 4 1/2" x 1 1/4" Dia. of thrust shaft under
 collars 7 1/4" Dia. of screw 9.6" Pitch of Screw 11-0" No. of Blades 4 State whether moveable h Total surface 32 sq
 No. of Feed pumps 2 Diameter of ditto 2 3/4" Stroke 12" Can one be overhauled while the other is at work h
 No. of Bilge pumps 2 Diameter of ditto 2 1/4" Stroke 12" Can one be overhauled while the other is at work h
 No. of Donkey Engines 2 Sizes of Pumps 6x4x6" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 3-2 In Holds, &c. ceil tanks
 No. of Bilge Injections 1 sizes 3 1/2" Connected to circulating pump Is a separate Donkey Suction fitted in Engine room & size h 2"
 Are all the bilge suction pipes fitted with roses h Are the roses in Engine room always accessible h Are the sluices on Engine room bulkheads always accessible h
 Are all connections with the sea direct on the skin of the ship h Are they Valves or Cocks Both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates h Are the Discharge Pipes above or below the deep water line h
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel h Are the Blow Off Cocks fitted with a spigot and brass covering plate
 What pipes are carried through the bunkers h How are they protected h
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times h
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges h
 Is the Screw Shaft Tunnel watertight h Is it fitted with a watertight door h worked from h

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Messrs. Wm Beardmore & Co. Ltd. 15B
 Total Heating Surface of Boilers 2064 sq ft Is Forced Draft fitted h No. and Description of Boilers one single ended, return tube
 Working Pressure 180 lbs Tested by hydraulic pressure to 320 lbs Date of test 17-8-25 No. of Certificate 16907
 Can each boiler be worked separately h Area of fire grate in each boiler 66 sq No. and Description of Safety Valves to
 each boiler 2 - direct spring Area of each valve 7.06 sq Pressure to which they are adjusted 185 lbs Are they fitted with easing gear h
 Smallest distance between boilers or uptakes and bunkers or woodwork 9" Mean dia. of boilers 15.0" Length 10.6" Material of shell plates steel
 Thickness 1/4" Range of tensile strength 32 ton Are the shell plates welded or flanged h Descrip. of riveting: cir. seams D.R.
 long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 3 1/2" Lap of plates or width of butt straps 18 1/2"
 Per centages of strength of longitudinal joint 86% Working pressure of shell by rules 183 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring 8 7/8" x 1 1/4" No. and Description of Furnaces in each boiler 3 - Morrison Material steel Outside diameter 3-9 1/4"
 Length of plain part top 9" Thickness of plates bottom 9/16" Description of longitudinal joint weld No. of strengthening rings
 Working pressure of furnace by the rules 184 lbs Combustion chamber plates: Material steel Thickness: Sides 1/16" Back 1/16" Top 1/16" Bottom 1/16"
 Pitch of stays to ditto: Sides 8 1/4" x 9" Back 9 1/2" x 8 1/2" Top 8 1/2" x 9 1/2" If stays are fitted with nuts or riveted heads h Working pressure by rules 198 lbs
 Material of stays steel Area supported by each stay 79 sq Working pressure by rules 181 lbs End plates in steam space:
 Material steel Thickness 1 1/4" Pitch of stays 19" x 21" How are stays secured double nut Working pressure by rules 182 lbs Material of stays steel
 Area at smallest part 3 1/8" Area supported by each stay 400 sq Working pressure by rules 180 lbs Material of Front plates at bottom steel
 Thickness 2 1/2" Material of Lower back plate steel Thickness 2 1/2" Greatest pitch of stays 14" Working pressure of plate by rules 230 lbs
 Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" Material of tube plates steel Thickness: Front 2 7/32" Back 2 7/32" Mean pitch of stays 12"
 Pitch across wide water spaces 14" Working pressures by rules 180 lbs Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 2-7 1/2" x 1 1/4" Length as per rule 2-3 1/2" Distance apart 9 1/2" Number and pitch of stays in each 2-8 1/4"
 Working pressure by rules 187 lbs Steam dome: description of joint to shell h % of strength of joint

SUPERHEATER. Type h Date of Approval of Plan h Tested by Hydraulic Pressure to h
 Date of Test h Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler h
 Diameter of Safety Valve h Pressure to which each is adjusted h Is Easing Gear fitted h

If not stated otherwise, all measurements are taken on the hull of the ship.

W5-0025



IS A DONKEY BOILER FITTED? *ho*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Connecting Rod bolts Top & Bottom. 3 Boiler tubes. 2 Main bearing bolts, 1 set coupling bolts, 1 set feed, Air, bilge & Circulating valves. 6 Condenser tubes, 12 Ferrules, 2 safety valve springs, 1 propeller, 1 set of valves for check valves, 6 Junk ring bolts & nuts, 6 cylinder cover studs & nuts, 1 set Valves for donkey pump. Assorted sizes of iron, bolts & nuts.

The foregoing is a correct description,

WILLIAM BEARDMORE & CO., LIMITED. *A. Houston* Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1925. Apr 22. May 6. June 9. 12. 17. July 7. Aug 14. 18. Sept 7. 21. 23. During erection on board vessel - - - Oct 16. 21. 23. 30 Nov 4. 6. 7. 9. 12. / 13. 14. June 11. 16. 30. July 8. 10. 31. Aug. 11. 17. Total No. of visits E-20. B.8. Is the approved plan of main boiler forwarded herewith *for*

Dates of Examination of principal parts—Cylinders 12-6-25 Slides 12-6-25 Covers 12-6-25 Pistons 17-6-25 Rods 17-6-25 Connecting rods 17-6-25 Crank shaft 12-6-25 Thrust shaft 4-8-25 Tunnel shafts Screw shaft 21-9-25 Propeller 21-9-25 Stern tube 21-9-25 Steam pipes tested 16-10-25 Engine and boiler seatings 21-10-25 Engines holding down bolts 21-10-25 Completion of pumping arrangements 21-10-25 Boilers fixed 21-10-25 Engines tried under steam (12-11-25 *Greenock*) Completion of fitting sea connections Stern tube Screw shaft and propeller Main boiler safety valves adjusted 30-10-25 Thickness of adjusting washers P 1/2" S. 7/16" Material of Crank shaft *steel* Identification Mark on Do. *1113* Material of Thrust shaft *steel* Identification Mark on Do. *1113* Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts *steel* Identification Marks on Do. *1113* Material of Steam Pipes *Copper* Test pressure 360 lbs. 0" Is an installation fitted for burning oil fuel *ho* 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 *ho* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery has been constructed under Special Survey in accordance with the approved Plan & Rules. The materials and workmanship are good. The machinery has been fitted on board the vessel, examined under steam and found satisfactory and is eligible in my opinion, to have the Record of + L.M.C. 11-25.*)

note - When steam was raised on this boiler a very slight leak developed at the butt of the shell plates in way of the lower butt straps. At the request of the Owners Representative, the ends of this butt straps were built up by Electric welding.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 11-25. CL

The amount of Entry Fee ... £ 3 : 0 Special *Engine* ... £ 16 - 10 Donkey Boiler Fee ... £ 13 : 16 Travelling Expenses (if any) £ :

When applied for, 23/11/25 When received, 20/2/26 *W.D.* 26/11/25 *W.D.* *W.D.* Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 24 NOV 1925 Assigned + L.M.C. 11-25. *YMA*



Glasgow
A.S.
23/11/25

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