

REPORT ON MACHINERY.

No. 2133

-9 JUN 1925

Received at London Office

1925

Date of writing Report 6 June 1925 When handed in at Local Office 8 June 1925 Port of Barrow in Furness
No. in Survey held at Barrow Date, First Survey 5 June 1925 Last Survey 5 June 1925
Reg. Book. on the Steel single screw steamer "Newfoundland" (bickers 18614) (Number of Visits 112)
Master Barrow Built at Barrow By whom built bickers Ld. Tons } Gross 6491
Engines made at Barrow By whom made bickers Ld. when made 1925
Boilers made at X By whom made X when made 1925
Registered Horse Power ✓ Owners Warren Line Ld. Port belonging to Liverpool
Nom. Horse Power as per Section 28 1044 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Balanced Quadruple Expansion No. of Cylinders 4 No. of Cranks 4
Dia. of Cylinders 31"-43"-62"-90" Length of Stroke 54" Revs. per minute 80 Dia. of Screw shaft as per rule 18.04 Material of Imperial
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 6'-6"
Dia. of Tunnel shaft as per rule 16.4 Dia. of Crank shaft journals as per rule 17.22 Dia. of Crank pin 18 3/4 Size of Crank webs 1 1/2 x 24 3/4 Dia. of thrust shaft under
collars 18 1/8 Dia. of screw 19'-4" Pitch of Screw 19'-1 1/2" No. of Blades 4 State whether moveable No Total surface 123.5
No. of Feed pumps 2 Diameter of ditto 10" Stroke 26" Can one be overhauled while the other is at work Yes
No. of Bilge pumps 2 Diameter of ditto 4 1/2" Stroke 28 1/2" Can one be overhauled while the other is at work Yes
No. of Donkey Engines 5 Sizes of Pumps 7x10, 10x10, 16x24, 6x6 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 1 1/2", 5' 4", 3 1/2" and 1 1/2" in Tunnel bell In Holds, &c. 2 1/2" in 17, 2 1/2" in 12, 2 1/2"
2 1/2" in 103, 2 1/2" in 14, 2 1/2" in 14, and 1 1/2" in 22 in Duct Keel
No. of Bilge Injections 1 sizes 1 1/4" Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine room & size 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 Yes
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 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
Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Bridge or Upper Deck

BOILERS, &c.—(Letter for record (S)) Manufacturers of Steel Wm Beardmore & Co. 55B
Total Heating Surface of Boilers 16095 Is Forced Draft fitted Yes No. and Description of Boilers 5 Single ended. Mult. Cyl.
Working Pressure 215 lb Tested by hydraulic pressure to 373 lb Date of test 29/1/25, 29/1/25, 7/2/25 No. of Certificate 334, 335, 336
Can each boiler be worked separately Yes Area of fire grate in each boiler 75.4 No. and Description of Safety Valves to
each boiler Two high lift Spring 3" dia Area of each valve 4.07 Pressure to which they are adjusted 220 lb Are they fitted with easing gear Yes
Smallest distance between boilers and bunkers 1'-8" Mean dia. of boilers 16'-9" Length 12'-0" Material of shell plates Steel
Thickness 1 1/32 Range of tensile strength 50/34 ton Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Overlap
long. seams 1 1/2 Diameter of rivet holes in long. seams 1 1/16 Pitch of rivets 10 1/2 Top of plates or width of butt straps 23"
Per centages of strength of longitudinal joint 88.4 Working pressure of shell by rules 216 lb Size of manhole in shell 2 1/2" x 14 1/2"
Size of compensating ring 1 1/4 x 9" x 1 1/32 No. and Description of Furnaces in each boiler 4 Reighton Material Steel Outside diameter 41 1/8"
Length of plain part top Thickness of plates crown Description of longitudinal joint Weld No. of strengthening rings ✓
Working pressure of furnace by the rules 241 lb Combustion chamber plates: Material Steel Thickness: Sides 23/32 Back 23/32 Top 23/32 Bottom 1/8"
Pitch of stays to ditto: Sides 10 3/8 x 7 1/4 Back 10 3/8 x 7 1/4 Top 10 3/8 x 8" If stays are fitted with nuts or riveted heads None Working pressure by rules 214 lb
Material of stays Steel Area at smallest part 1 3/4" Area supported by each stay 81.5 Working pressure by rules 224 lb End plates in steam space:
Material Steel Thickness 1 3/16 Pitch of stays 18 1/2 x 16 1/4 How are stays secured Double nuts Working pressure by rules 214 lb Material of stays Steel
Area at smallest part 2 3/4 Area supported by each stay 300.6 Working pressure by rules 218 lb Material of Front plates at bottom Steel
Thickness 1 5/16 Material of Lower back plate Steel Thickness 29/32 Greatest pitch of stays 14 1/2 x 10 1/2 Working pressure of plate by rules 217 lb
Diameter of tubes 8 1/4 Pitch of tubes 4 3/8 x 4 3/8 Material of tube plates Steel Thickness: Front 1 5/16 Back 29/32 Mean pitch of stays 14 1/2 dia of boiler
Pitch across wide water spaces 14" Working pressures by rules 222 lb Girders to Chamber tops: Material Steel Depth and
thickness of girder at centre 8 1/2" x 1 1/2 Length as per rule 2'-8 3/8 Distance apart 8" Number and pitch of stays in each 2 @ 10 3/4
Working pressure by rules 220 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 ✓
SUPERHEATER. Type North Eastern Date of Approval of Plan ✓ Tested by Hydraulic Pressure to 430 lb
Date of Test 16-4-25 & 24-4-25 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes
Diameter of Safety Valve 3" Pressure to which each is adjusted 225 lb Is Easing Gear fitted Yes

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Top end bell nuts. 2 Bottom end bell nuts. 2 main bearing bell nuts. 1 set of Coupling bell. 1 set of Head & Bilge pump valves. 1 pair of Bottom end Bushes. 1 No pump rod & head valve. 1 HP slide spindle. 1 screw shaft complete. 3 main safety valve springs. 3 superheater safety valve springs. Piston rings for HP, 4 MP, 2nd MP & LP piston. 1 Piston rod shoe. 1 Bilge pump ram. 1 Circulating pump impeller & spindle. Crosshead branes & crank pin frames. Assorted bell nuts. steel rod steel etc.

The foregoing is a correct description,
FOR VICKERS LIMITED,

J. Galland

Manufacturer.

1924- June 26 July 26 Aug 26 Sept 5 10 22 Oct 2 9 17 24 28 Nov 5 7 11 13 17 18 19 24 25 27 Dec 1 1 2 3 11 12 16 17
Dates of Survey while building { During progress of work in shops - - 19 23 24 29 30 1925 - Jan 2 6 8 9 14 15 16 19 20 21 23 24 25 29 30 Feb 2 3 6 7 11 13 16 19 23 25 27 March 2 4 30 31
During erection on board vessel - - Jan 30 Feb 14 15 16 18 20 26 March 4 11 15 19 20 23 24 27 April 1 2 3 5 10 14 May 2 11 12 13 14 18 25 June 2 3 4 5
Total No. of visits 112

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 10-2-25. Slides 2-2-25. Covers 2-2-25. Pistons 2-2-25. Rods 2-2-25. Connecting rods 2-2-25. Crank shaft 24-1-25. Thrust shaft 8-1-25. Tunnel shafts 9-1-25. Screw shaft 9-1-25. Propeller 8-1-25. Stern tube 24-12-24. Steam pipes tested 14/25 16/4/25. Engine and boiler seatings 23-1-25. Engines holding down bolts 8-4-25. Completion of pumping arrangements 3-6-25. Boilers fixed 8-4-25. Engines tried under steam 4-6-25. Completion of fitting sea connections 23-1-25. Stern tube 16-1-25. Screw shaft and propeller 23-1-25. Main boiler safety valves adjusted 11-5-25. Thickness of adjusting washers 1/4 PV 3/8 SV 3/8 Sep 1/32 1/8 PV 3/8 SV 1/32 Sep 1/2

Material of Crank shaft Ingot steel Identification Mark on Do. 389 489 Material of Thrust shaft Ingot steel Identification Mark on Do. 389 489
Material of Tunnel shafts Ingot steel Identification Marks on Do. 389 489 Material of Screw shafts Ingot steel Identification Marks on Do. 389 489
Material of Steam Pipes Solid drawn steel Test pressure 645 lb. per sq. inch

Is an installation fitted for burning oil fuel

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

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

The engines and boilers of this vessel have been built under special survey. The materials and workmanship are good. They have been efficiently fitted on board and proved satisfactory under working conditions. The vessel is eligible in my opinion to have the notation of 6.25 made in the Register Book.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 6.25. FD. CL.

Fitted for oil fuel 6.25. FP. above 150°F.

The amount of Entry Fee ... £ 6 : 0 :
Special ... £ 126 : 3/6 :
Donkey Boiler Fee ... £ - : - :
Travelling Expenses (if any) £ 1 : 12/6 :
When applied for, 8th June 1925
When received, 11th June 1925

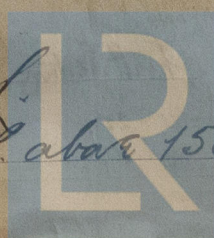
Committee's Minute

FRI. 12 JUN 1925

Assigned

+ LMC 6.25 32. CL.
Fitted for oil fuel 6.25 FP. above 150°F.

Engineer Surveyor to Lloyd's Register of Shipping.



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Lloyd's Register
Foundation