

REPORT ON MACHINERY.

No. 41843

Received at London Office

Date of writing Report 31-3-22 When handed in at Local Office 31-3-22 Port of Glasgow.
 Date, First Survey 27.5.1921 Last Survey 17.3.1922
 (Number of Visits 23)

Survey held at Coatbridge.
 on the Machinery for S.S. "RIVER ELY"
 Tons { Gross
 Net

Built at Monkrose By whom built London & Monkrose S.S. 92. When built

Engines made at Coatbridge By whom made Wm Beardmore & Co. Ltd. No. 581. when made 1922.

Boilers made at Greenock By whom made Messrs Kincaid & Co. No. 119. when made

Registered Horse Power Owners Llanelynn & Co. Ltd. Port belonging to Cardiff

Com. Horse Power as per Section 28 114 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" 140" Length of Stroke 27 Revs. per minute Dia. of Screw shaft as per rule 8 1/8" Material of screw shaft M.S.

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 If the liner is in more than one length are the joints burned Yes 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' 1"

Dia. of Tunnel shaft as per rule 7 3/4" Dia. of Crank shaft journals as per rule 4 1/4" Dia. of Crank pin 1 1/4" Size of Crank webs 15 x 4 1/2" Dia. of thrust shaft under

collars 1 3/4" Dia. of screw 10-6" Pitch of Screw 11-3" No. of Blades 4 State whether moveable No Total surface 39 sq ft

No. of Feed pumps 2 Diameter of ditto 3" Stroke 13 1/2" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 3" Stroke 13 1/2" Can one be overhauled while the other is at work Yes

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room In Holds, &c.

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

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

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

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

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

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

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

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

Total Heating Surface of Boilers 2102 sq ft Is Forced Draft fitted No. and Description of Boilers

Working Pressure 180 Tested by hydraulic pressure to Date of test No. of Certificate

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

each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length 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 plain 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 End plates in steam space:

Material of stays Area at smallest part Area supported by each stay Working pressure by rules Material of stays

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of Front plates at bottom

Area at smallest part Area supported by each stay Working pressure by rules Working pressure of plate by rules

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 pressures 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 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 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Date of Test Pressure to which each is adjusted Is Easing Gear fitted

Diameter of Safety Valve

Lloyd's Register Foundation

005567-005571-0257

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

For WILLIAM BEARDMORE & CO., LIMITED.

Manufacturer. *R. Sneddon.*

Dates of Survey while building { During progress of work in shops -- } 1921 May 27 Jun 7 10 29 Jul 12 Aug 9 12 25 Sep 6 Oct 7 12 18 28 Nov 4 11 15 28 30 Dec 8 21 (1921)
{ During erection on board vessel -- } Jan 19 Feb 15 Mar 17
Total No. of visits 23.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 15-11-21 Slides 28-11-21 Covers 15-11-21 Pistons 15-11-21 Rods 15-11-21
Connecting rods 28-11-21 Crank shaft 11-11-21 Thrust shaft 8-12-21 Tunnel shafts ✓ Screw shaft 8-12-21 Propeller 8-12-21

Stern tube 8-12-21 Steam pipes tested Engine and boiler seatings Engines holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft M.S. Identification Mark on Do. 8943 No. 11-11-21

Material of Tunnel shafts ✓ Identification Marks on Do. Material of Thrust shaft M.S. Identification Mark on Do. 8943 No. 8-12-21

Material of Steam Pipes Identification Marks on Do. Material of Screw shafts M.S. Identification Marks on Do. 8-12-21

Is an installation fitted for burning oil fuel Test pressure

Have the requirements of Section 49 of the Rules been complied with Is the flash point of the oil to be used over 150°F.

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. The Engines have been built under Special Survey in accordance with the Rules of the Society. The materials & workmanship are good. The Engines have been dispatched to Dundee to be fitted on board the vessel.

This engine has now been satisfactorily fitted on board. For full particulars, please see Dundee Report No. 8369, sent herewith.

John Mackenzie

The amount of Entry Fee ... £ 3 : 0 :
Special ... £ 11 : 8 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 4/4/22
When received, PAID PER SECRETARY'S LTR 10 May 1922

John Barr

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW

4 APR 1922

FRI. 26 MAY. 1922

Assigned Defered



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