

REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

(Received at London Office 20 AUG 1942)

Date of writing Report 19th August 1942 When handed in at Local Office 20th August 1942 Port of London

No. in Survey held at Tilbury & London Date First Survey 30th Mar 1942 Last Survey 6th August 1942

1050 on the Machinery of the ~~British Iron~~ Steel S/S "EMERALD" (No. of Vessels 22)

Gross 736 Net 305 Vessel built at Port Glasgow By whom A. Rodger 16th When 1904-8

Engines made at Glasgow By whom A. Rodger 16th When 1904

Boilers, when made (Main) 1904 (Donkey)

Owners Wm Robertson Owners' Address (if not already recorded in Appendix to Register Book.)

Managers Managers' Address (if not already recorded in Appendix to Register Book.)

Surveyed Afloat in Dry Dock Western Dry Dock King George V. Dock Voyage

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Particulars of Examination and Repairs (if any) L. M. C.

CHARACTER. For Special Survey Date of 1st Survey and of Periodical Surveys.

Machinery and Boiler Surveys (including date of N.R., if any).

*100 A.1. 10.38 *L.M.C. *N.B. 2.29

SSM 2nd N.B. 2.29 MS. 6.37

SSM 2nd N.B. 2.29 BS 3.40

SSM 2nd N.B. 2.29 TS. CL 5.37

Is a damage report made by anyone else? If so, by whom?

Did the Surveyor personally go inside Main Boiler and make a thorough examination at this time? Yes

Did the Surveyor personally go inside Donkey Boiler and make a thorough examination at this time? Yes

What parts of the Boilers could not be thus thoroughly examined?

What special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler?

Latest date of internal examination of each boiler 20th July 1942

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes

Did the Surveyor examine the Safety Valves of the Donkey Boiler? Yes

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes

Did the Surveyor examine the drain plugs of the Main Boilers? None fitted

Did the Surveyor examine all the mountings of the Main Boilers? Yes

Has the screw shaft now been drawn and examined? Is it fitted with continuous liner? Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

Has the screw shaft now been changed? Yes If so, state reasons Shaft destroyed whilst under Admiralty control

Has the screw shaft now been fitted been previously used? No Has it a continuous liner? Yes Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? No

Date of examination of Screw Shaft 15/7/42 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft Close

Engine parts, when referred to by numbers, should be counted from forward.

Did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

Is electric light and/or power fitted? Yes

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? Yes

Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete

Work done:- Vessel placed in dry dock. Sea connections and outside fastenings examined and placed in order. Whilst the vessel was under Admiralty control the screw shaft was burnt through at the after end of liner and propeller removed.

HP, MP, LP cylinders, pistons and rods, slide valves, steam chests, top end pins and brasses, crank pins and cranks, crank journals and main bearings, condenser, main and auxiliary pumps, pumping arrangement opened out, working parts examined and placed in order.

Main and auxiliary steam pipes tested hydraulically to Rule requirements.

Boiler examined internally and externally, safety valves, mountings, manhole doors and found in good condition, later examined under steam and the safety

(See overleaf).

General Observations, Opinion, and Recommendation:- The machinery of this vessel is in good

State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, B.S. 9, 11, B.&M.S. 9, 11, L.M.C. 9, 11, or

L.M.C. 140 lb., F.D., &c.)

Efficient condition and eligible, in our opinion, to remain as classed with a fresh

out of L.M.C. 8.42 also T.S. (CL) N 7.42

Fee (per Section 20) L.M.C. £ 7 : 0 : 0 Fees applied for

Repair Fee (if any) £ 3 : 3 : 0 20 AUG 1942

Other expenses (if chargeable) £ :

Received by me, J. Trincholas, L. Blaua R.A.D. 19

Committee's Minute TUE. 15 SEP 1942

Signed L.M.C. 8.42

Engineer Surveyor to Lloyd's Register of Shipping.

As a Certificate required? If so, to be sent to

CERTIFICATE WRITTEN

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Lloyd's Register Foundation

Continued:

valves adjusted to 160 lbs./sq."

Wear and Tear Repairs: HP cylinder removed for access to slide valve false face, lap bolts in false face overhauled and made good where necessary. LP astern guide shoe found fractured across face, guide shoe now renewed; LP astern guide found fractured across face, column removed, fracture machined out and false guide face secured to column. HP, MP, LP piston rods and valve spindles found slightly pitted now skimmed and rebushed; crosshead pins cleaned up and brasses adjusted. Thrust shaft collars and journals found pitted now skimmed and bearings re-metalled. Air and circulating pump rods, feed and bilge rams found scored now skimmed and rebushed. Main discharge pipe found generally thin now renewed. Main discharge and ballast pump overboard discharge valve chests removed, tested hydraulically and found efficient. A new screw shaft fitted with a C.L. (stamped L.L.O.Y.D.'S NO 8529 3.6.42 C.P.) together with a new four bladed (C.I.) propeller now satisfactorily fitted in place. Spare propeller bars skimmed out to suit new screw shaft. Forging certificate attached.

On completion of repairs the main and auxiliary machinery were tried under steam and found satisfactory.

Electrical Installation. Dynamo and Installation tested under full load conditions for insulation resistance, and found satisfactory.

HP hold.
Screw shaft & propeller renewed.
Thrust shaft, piston rods, valve
spindles, pump rods, crosshead
& column repaired & renewed
repairs.

It is submitted that
this vessel is eligible for
THE RECORD.

7/11/42
SN 742

14/9/42