

# Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office)

26 JAN 1947

Date of writing Report 30. 11. 1946. When handed in at Local Office 1. 12. 1946. Port of Lagos.  
 No. in Survey held at Lagos. Date, First Survey 13. 9. 46. Last Survey 29. 11. 1946.  
 Reg. Book. 72695 on the Machinery of the Wood, Iron or Steel. S. S. EMPIRE LIDDELL (No. of Visits 7)

Tonnage { Gross 1125 Vessel built at Middlesbrough By whom W. Harkness & Sons Ltd. Year. Month. 1920  
 Net 784 Engines made at Middlesbrough By whom Richardson Westgarth When 1920  
 Nominal Horse Power — Boilers, when made (Main) 1920 (Donkey) —  
 No. of Main Boilers 2 Owners Ministry of War Transport Owners' Address —  
Arden Hill St. Co (Pls) Ltd. (if not already recorded in Appendix to Register Book.)  
 No. of Donkey Boilers — Managers Tides Demeter Lines Port London Voyage —  
 Steam Pressure— 180 If Surveyed Afloat or in Dry Dock Afloat Lagos.  
 In Main Boilers — (State Name of Dock.)  
 In Donkey Boilers —

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

CHARACTER for Special Survey Date of last Survey and of Periodical Surveys.	Years assigned now expired.	Machinery and Boiler Surveys (including date of N.B., if any)
100A - Classification		M.S. 2.11.41
Contemplated 6.45		B.S. 6.45
Examined 6.45		TS CL 3.45
CARGO BATTENS NOT FITTED		

Last Report No. — Port —  
Particulars of Examination and Repairs (if any) B.S. and machinery repairs

Periodical Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case. London cables 2.10.46 and 8.10.46.

In damage cases, where the Surveyor has not made a special damage report, he is required to state whether he offered his services for this purpose, and why they were declined.

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

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

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

If this was not done, state for what reasons? —

And what parts of the Boilers could not be thus thoroughly examined? —

Also 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? —

State latest date of internal examination of each boiler. Port 18.10.46 Starbd 20.10.46. Present condition of funnel(s) —

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes P & S. To what pressure were they afterwards adjusted under steam? —

Did the Surveyor examine the Safety Valves of Donkey Boiler? — To what pressure were they afterwards adjusted under steam? —

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes P & S. and of the Donkey Boilers? —

Did the Surveyor examine the drain plugs of the Main Boilers? — and of the Donkey Boilers? —

Did the Surveyor examine all the mountings of the Main Boilers? Yes P & S. and of the Donkey Boilers? —

Has screw shaft now been drawn and examined? No 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 shaft now been changed? — If so, state reasons —

Has the shaft now fitted been previously used? — Has it a continuous liner? — Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? —

State date of examination of Screw Shaft — State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft —

Engine parts, when referred to by numbers, should be counted from forward. Is electric light and/or power fitted? —

So, did the Surveyor examine the generators, motors, switchgear, cables and fuses? —

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

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done. Safety valves both boilers to adjust.

NOW DONE FOR B.S. The port and starbd boilers examined internally and externally, with safety valves doors, and mountings and found or placed in an efficient condition.

NOW DONE FOR WEAR AND TEAR REPAIRS

Boilers (P & S) all lower manholes built up by electric welding. All C.C. tops, several pits filled by electric welding. Several wasted C.C. nuts renewed. Wrapper plate seams part caulked. Port boiler Port C.C. 3 crown stays renewed. 1 C.C. stay renewed. Centre C.C. 4 C.C. stays renewed and back plate in way built up where wasted. Starbd C.C. 10 C.C. stays renewed and back plate built up in way built up where wasted. 1 stay tube renewed. Shell plate rivet renewed in front end plate circumferential seam next centre furnace. The safety valve springs found somewhat wasted and could not be renewed at this time as unobtainable. Starbd boiler Port C.C. 2 crown stays renewed. Centre C.C. 2 crown stays renewed. Starbd C.C. 2 C.C. stays renewed. P.T.O.

General Observations, Opinion, and Recommendation:— The machinery of this vessel

(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, etc.; thus, for example, B.S. 9,11, B. & M.S. 9,11, L.M.C. 9,11, or LMC 140 lb., F.D., etc.)  
CS 3,34.

As now seen is in an efficient condition and eligible in my opinion to remain as classed with fresh record of B.S. 11.46 when the safety valves have been adjusted under steam; subject to the port boiler safety valve springs being renewed and dynamo repairs being carried out at the discharge port and to main engine H.P. valve spindle being renewed at earliest opportunity.

Survey Fee (per Section 29) B.S. £ 17: 10: 0  
 Special Damage or Repair Fee (if any) — £ 4: 4: 0  
 Travelling expenses (if chargeable) — £ 17 0  
 Fees applied for 29. 11. 1946.  
 Received by me, — 19

Committee's Minute — FRI. 31 JAN 1947

Assigned Defered

Ron Jones  
Engineer Surveyor to Lloyd's Register of Shipping.



Insert Character of Ship and Machinery precisely as in the Register Book.

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

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Minor repairs carried out to mountings on both boilers.

SMILING ENGINE barrell shaft (worn in way of gear wheel) renewed.

The above repairs have been efficiently carried out.

S.R.L. The main engine bracket carrying H.P. and L.P. valve guides together with H.P. valve guide were efficiently renewed at this time. The H.P. valve spindle remains to be renewed. Due to pressure of work the dynamo has not been rewound (windings on board).

It is recommended that "Fit new H.P. (not L.P.) guide" bracket now be deleted from the Special Reasons List.

It is recommended that the port boiler safety valve springs be renewed and dynamo repairs be carried out on arrival at the discharge port and the main engine H.P. valve spindle be renewed at earliest opportunity in the meanwhile they are considered efficient.

*J.H.*

