

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

(Received at London Office)

JUN 1944

Date of writing Report 31<sup>st</sup> May 1944 When handed in at Local Office 31<sup>st</sup> May 1944 Port of London  
 No. in Survey held at London Date First Survey 5/7/43 Last Survey 16/5/44 1944  
 Reg. Book. 21612 on the Machinery of the Steel See Sec. 11 "CHESHIRE" (No. of Visits 37)

Tonnage { Gross 10552 Vessel built at Glasgow By whom Fairfield & Co. Ltd When 1927 Year. Month.  
 Net 6605 Engines made at Glasgow By whom Fairfield & Co. Ltd When 1927  
 Nominal Horse Power 2196 Boilers, when made (Main) (Donkey) 1927  
 No. of Main Boilers 1 Owners Bibby Line Ltd Owners' Address (Donkey)  
 No. of Donkey Boilers 1 Managers Bibby Bros Ltd (if not already recorded in Appendix to Register Book.)  
 Steam Pressure in Main Boilers 120 lbs Port Liverpool Voyage  
 in Donkey Boilers 120 lbs Surveyed Afloat & in Dry Dock King George V. Dock and Western Dry Dock  
 (State name of Dock.)

Last Report No. Port Particulars of Examination and Repairs (if any) L. M. C.

(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.)

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?

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

If not, state for what reasons

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

Did the Surveyor examine the Safety Valves of the Main Boilers?

Did the Surveyor examine the Safety Valves of the Donkey Boilers?

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

Did the Surveyor examine the drain plugs of the Main Boilers?

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

Has the screw shaft now been drawn and examined?

Has shaft now been changed?

Is an approved oil retaining appliance fitted at the after end?

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.

Now done:- Vessel placed in dry dock. Propellers, screw shafts (drawn in) sea connections examined and found or placed in good condition  
Port and Starboard Main Engines:- All cylinder packets (including forward and after compressors), heads, valves and valve gear, liners, pistons and rods, crossheads, guides, top end pins and brasses, connecting rods, crank pins and brasses, crank journals and main bearings, thrust shafts, intermediate shafting opened out; working parts examined and placed in good order.  
Auxiliary Compressors and Generators (3). All cylinder packets (including compressors) heads, valves and valve gear, liners, pistons, gudgeon pins and brasses, crank pins and brasses, crank journals and main bearings opened out; working parts examined and placed in good order.  
Primary Compressor (Steam driven): Compressor cylinder, liner, piston, gudgeon pin and (see following sheet)

General Observations, Opinion, and Recommendation: The machinery of this vessel is in good and efficient condition and eligible, in our opinion, to remain as classed with a fresh record of L.M.C. CS 4.44, T.S. CL (P.S) 3.44 and D.B.S. 4.44.

Survey Fee (per Section 29) L.M.C. £24 0 0 Fees applied for 8 JUN 1944  
 Special Repair Fee (if any) D.B.S. £3 0 0  
 (per Section 29.) FILE £15 15 0  
 Travelling expenses (if chargeable) £5 0 0  
 Committee's Minute TUES. 4 JUL 1944  
 Assigned + L.M.C. 5.44  
£3.44 D.B.S. 4.44

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)
* 100 A.1.		* L.M.C. CS 1.36
9.39		9.38
SS Ben N°2. 35		D.B.S. 4.39
		T.S. CL. 7.39.
		OIL ENGINE
		CONTINUOUS SURVEY.

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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bush, connecting rod, crank pin and brasses, crank journal and main bearing, steam cylinder, piston and rod, slide valve and steam chest; top and bottom end brasses, crank pin, crank journals and main bearings opened out working parts examined and found in order.

Intercoolers: - Port and starboard main engine HP, MP and LP intercoolers removed, cleaned and hydraulically tested and found good.

Starting Air Receivers: - Upper, middle and lower (600 lbs/p) together with the 350 lbs/p receiver examined internally and externally and found good.

Injection Air Receivers: - Port (3) and starboard (3) main engine injection air receivers examined internally and externally, tested hydraulically to 2000 lbs/p and found good.

Pumps: - Ballast, feed and bilge, piston and jacket cooling pumps opened out working parts examined and placed in good condition. Pumping arrangements examined and placed in order.

Lubricating oil cooler, upper and lower coolers for piston cooling water opened out, cleaned, examined and tested hydraulically to 35 lbs/p and placed in order. Steam condenser opened up, cleaned, examined and tested. Starboard settling tank opened up, cleaned and examined internally and found satisfactory.

Repairs: - Port and starboard screw shafts drawn in, liners found thin in way of packing and stern bush bearing; spare screw shafts previously used and fitted with new continuous liners now fitted; stern bushes bored out to suit increased diameter. The screw shafts were found stamped as follows: - Port: - L.R. 74 M. 10.7.28. NEW LINER. L.C.D. 18.11.41 (Lb)  
Starboard: - L.R. 46 M. 10.7.28. NEW LINER L.C.D. 6.4.39 (Lb)

Main Engines: - Port N°1 and starboard N°3, 7 piston heads found fractured now renewed. Port N°1, 2, 3, 4, 7 and starboard N°2, 6, 8 lower half top end brasses white metal found fractured now remetalled. Port N°3, 4, 7, 8 and starboard N°2, 3, 5, 6, 7 crank pin crown brasses white metal found fractured now remetalled. Starboard N°4, 5, 6, 7, 8 lower half of main bearings remetalled to correct deflection. Port forward main engine compressor LP stage liner found worn, liner skimmed out and piston renewed; cooling water spaces tested hydraulically to 45 lbs/p and found satisfactory. Starboard forward main engine compressor HP stage liner found scored now renewed. Port after main engine compressor gudgeon pin found slack in housing now renewed.

N°2 Auxiliary Compressor and Generator: - N°2, 3 gudgeon pins found slack in housings now renewed. White metal in N°4 crank pin brasses, pedestal and after thrust bearings found cracked now remetalled. White metal in lower half of all main bearings renewed for wear.

Pumps: - Port centrifugal ballast pump impeller shaft found worn in



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way of gland now renewed. Bilge pump (duplex type) bucket liners found scored now renewed. Piston cooling water pump suction sluice valves (2) reconditioned. Jacket cooling water inlet sluice valves (2) found corroded now renewed. Bilge forward and after main suction valves (2) covers and spindles found corroded now renewed. Bilge pump discharge valve spindle found worn now renewed.

Lubricating oil cooler water end boxes found wasted now renewed. Upper and lower piston cooling water cooler water end boxes found wasted (1 per cooler) now renewed.

Minor overhauling carried out where necessary.

Main and auxiliary machinery examined under working conditions, as far as practicable, whilst moored alongside quay wall and found satisfactory.

DBS:- Donkey boiler examined internally and externally, safety valves, mountings, manhole and hand hole doors found in good order, later examined under steam and the safety valves adjusted to 120 lbs/sq. in.  
G. B. Dux.

ELECTRICAL INSTALLATION.

The tween-decks and holds have been temporarily converted into mess deck spaces for troop accommodation and have been provided with electric lighting.

Crane type hoist cranes have been fitted for hoisting landing craft.

Alterations have been carried out in way of the original cabin decks to accommodate executive staff.

Ingenue room motors, generators, and switchgear have been overhauled and cleaned out.

Damaged Blower motor cables have been satisfactorily repaired.

Armature banding wire renewed on 102 Generator

Emergency dynamo armature has been rewound.

The installation was examined and tested under working conditions and found satisfactory

Bunyan