

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

(Received at London Office 10 NOV 1934)

Report of Survey for Repairs, &c., of Engines and Boilers.
 Date of writing Report 2nd Nov. 1934 When handed in at Local Office 2nd Nov 1934 Port of Belfast.
 in Survey held at Belfast Date, First Survey 20th Sept. Last Survey 26th Oct. 1934
 258 on the Machinery of the Wood, Iron or Steel T.S. IROQUOIS (No. of Vints 23)
 Gross 9202 Vessel built at Belfast By whom Harland & Wolff Ltd. When 1907-10
 Net 5772 Engines made at " By whom " " When 1907
 Main Boilers 4 Boilers, when made (Main) 1907 (Donkey) -
 Owners Anglo-American Oil Co Ltd. Owners' Address
 Managers F. J. Wolfe (if not already recorded in Appendix to Register Book.)
 Port Belfast Voyage
 If Surveyed Afloat or in Dry Dock Alexandria D.D.
 (State name of Dock.)
 Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Report No. Port

Particulars of Examination and Repairs (if any) LMC

1. Surveys, when held, must be reported in detail and scribatim in the terms of the Rules. State clearly the Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and details of any letters respecting this case.

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

3. A special damage report made by anyone else? If so, by whom?

4. Has the Surveyor personally gone inside each Main Boiler separately and made a thorough examination at this time? Yes

5. Has the Surveyor personally gone inside each Donkey Boiler separately and made a thorough examination at this time? Yes

6. If not done, state for what reasons?

7. Have parts of the Boilers could not be thus thoroughly examined?

8. Have 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?

9. Date of internal examination of each boiler 19/10/34 Port 7.10. boiler 23/10/34 Starboard 7.10. boiler

10. Has the Surveyor examined the Safety Valves of the Main Boiler? Yes

To what pressure were they afterwards adjusted under steam? 215 lb D

11. Has the Surveyor examined the Safety Valves of Donkey Boiler? Yes

To what pressure were they afterwards adjusted under steam?

12. Has the Surveyor examined all the manholes, doors and their fastenings of the Main Boilers? Yes

and of the Donkey Boilers?

13. Has the Surveyor examined the drain plugs of the Main Boilers? Yes

and of the Donkey Boiler?

14. Has the Surveyor examined all the mountings of the Main Boilers? Yes

and of the Donkey Boiler?

15. Has the shaft now been drawn and examined? Yes - Starboard only Is it fitted with continuous liner? Yes - jointed as an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

16. Has the shaft now been changed? No If so, state reasons

17. Has the shaft now been 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?

18. Date of examination of Screw Shaft 3/10/34 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft P-5 S- close fit

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

Is electric light and/or power fitted? Yes

20. If the survey is not complete, state what arrangements have been made for its completion and what remains to be done

NOW DONE:- Vessel in dry dock; propellers, sea fastenings and sea connections examined. Starboard screw shaft drawn out and examined (jointed continuous liner) A crack, nearly 3 ins long, was noted in the liner. This crack was situated 9" aft of the middle of the liner and was about 60° to the horizontal axis. At some previous time it had been pinned at the ends and run up with in solder or similar metal. No extension or opening was found and, in my opinion, the liner is meanwhile efficient.

The following parts of machinery opened out and examined:- Port & Starboard main engine cylinders, pistons valves & casings, top ends, bottom ends, guides, crossheads, crankshafts & bearings, thrust shafts & bearings, attached bilge pumps, Port & Starboard air and circulating pumps & condensers, feed pumps, hotwell pumps, ballast, general service, fire and sanitary.

Observations, Opinion, and Recommendation:- The machinery of this vessel is nearly 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 alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, R.S. 9.11, B.&M.S. 9.11, & L.M.C. 9.11, or R.S. 3.34.

Eligible, in my opinion, to remain as classed with fresh record of + LMC 10,34 subject to D.B. not being used and joints of liners on Starboard T.S. being examined for every 2 years

NOTE:- Starboard screw shaft seen 10,34

or Section 29) LMC £ 14 : : : Fees applied for

9th Nov 1934

10. Repair Fee (if any) £ : : :

11. Charges (if chargeable) £ : : :

Received by me

22.12.34

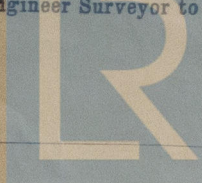
12. See's Minute

FRI. 23 NOV 1934

+ LMC 10.34 Subject

CERTIFICATE WRITTEN

John Rundle 2019
 Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
 Foundation

pumps, boiler fuel oil pumps, P. S. reversing engines, steering engine and windlars. Pumping arrangements examined. Main steam pipes tested hydraulically.

Electrical Survey Port & Starboard dynamo engines opened out and examined. Both dynamos removed to shop, overhauled & tested. All circuits tested with 500 volt megger. Several circuits overhauled and retested.

B.S. All ^{main} boilers and their mountings opened out and examined internally and externally. The safety valves adjusted under steam. The front end plate manhole door on each boiler, at middle height of boiler opening into space between tubes of two low furnaces, was fitted into with dogs & nuts & welded in position. Nuts spot welded.

REPAIRS

Starboard Main Engine:— FP bottom half bottom end reinstalled. 2nd MP top half top end reinstalled. Nos 4, 5, & 6 bottom halves main bearings turned out and scraped up. Bilge pump suction & discharge valve lids & seats skimmed.

Port Main Engine:—

FP bottom half bottom end reinstalled. 2nd MP bottom end reinstalled. 2nd MP ahead eccentric strap top half reinstalled. Bilge pump suction & delivery valves skimmed. Main steam pipe expansion gland tail piece at intermediate stop valve renewed.

Hotwell pump:— All rods skimmed & rebushed. Piston rings renewed.

Circulating pumps (2) Impeller shafts renewed.

Air pump (Port) Rods skimmed & rebushed.

O.F. pumps Steam & oil piston rings renewed. O.F. heaters tested.

Main feed pumps Steam rings renewed. Suction & delivery group valve skimmed up.

New surface heater fitted to main feed line.

Boilers. 1 main check valve lid and spindle renewed. Blow down valve cover studs renewed. Several tubes expanded.

Alterations to Engine room Bilge Lines

The steam duplex Bilge pump was discarded and new bilge ^{pipes} fitted and connected to the Fire, Sanitary, & Refrig. circulating pumps as shown in attached sketch. Sizes of Pumps:—

Fire Pump	16" x 10" x 14"
Sanitary "	8" x 6" x 12"
Refrig. circ. "	5 1/4" x 5" x 5"

Discarded Steam Duplex " 10" x 8" x 12"

All valves fitted are of non-return type and the pumps were tried out under working conditions with satisfactory results.

Ballast Pump This pump was removed from vessel and the own proposal to utilize the Fire pump and its existing connections to the ballast line for pumping ballast merits, in my opinion the favourable consideration of the Committee.