

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

26 AUG 1936

(Received at London Office)

Date of writing Report 22. 8. 1936 Port of Glasgow

Survey held at Glasgow Date, First Survey 29. 5. 36 Last Survey 15- 8- 1936 (No. of Visits 35)

706 on the Machinery of the Wood, Iron or Steel Trp. Co. 4 Mst. "CERAMIC"

Gross 18713 Vessel built at Belfast By whom Harland & Wolff Ltd When 1913  
Net 11582 Engines made at Belfast By whom Harland & Wolff Ltd When 1913

Boilers, when made (Main) 1913 (Donkey) Owners Shaw, Savill, Albion Co. Ltd

Managers Owners' Address (if not already recorded in Appendix to Register Book.) Port Southampton Voyage Australia

If Surveyed Afloat or in Dry Dock Afloat & Gosan 17. 3. 36 Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

st Report No. Port

Particulars of Examination and Repairs (if any) Classification Damage

Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the nature 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 details being detailed in the body of the report, should be briefly summarised at the end of the report. State also the initials and initials of any letters respecting this case.

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

Is 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 go inside each Donkey Boiler separately and make a thorough examination at this time?

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

Did the Surveyor examine the Safety Valves of the Main Boiler? 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? and of the Donkey Boilers?

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

Did the Surveyor examine all the mountings of the Main Boilers? and of the Donkey Boiler?

Has 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 shaft now been changed? If so, state reasons. Has it a continuous liner? Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

Date of examination of Screw Shaft. State the distance between lignum vite or bearing metal of stern bush and top of after bearing of screw shaft. Is electric light and/or power fitted?

Engine parts, when referred to by numbers, should be counted from forward. The Survey is not complete, state what arrangements have been made for its completion and what remains to be done.

Done for Damage, stated caused by heavy weather between 2nd April and 10th May 1936, whilst on a voyage from Fremantle to Southampton.

Vessel placed in Dry Dock. Centre screw shaft examined (drawn inboard). Two fractures found in screw shaft in way of after end of main running circumferentially (1) approximately 8" long (2) approximately 2 1/2" long.

Shaft now renewed, fitted with continuous liner. Mark:- LLOYD'S NO 2696 JHB 10. 8. 36.

Done for L.M.C. Vessel placed in Dry Dock. The following examined & found in good condition:-

Expellers, stern bushes, sea connections (pendant) underwater fastenings, screws shafts (drawn inboard), all cylinders, pistons, cranks, valves, crank, thrust & intermediate shafts of the reciprocating engines, the blades of rotor drum & thrust, intermediate shafts of exhaust steam turbine, all pumps, condensers (under test) pumping arrangements, winches & steering systems.

All boilers examined in their entirety, with steam pipes & expansion joints - examined under steam & their safety valves adjusted as stated.

General Observations, Opinion, and Recommendation:-

(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.)

This vessel's machinery is now in good condition, eligible in my opinion to be classed in the Society's Register Book with notations L.M.C. 8.36. T.S. (cc) 8.36.

24/8/36.

Survey Fee (per Section 29) £ 2 2 - Fees applied for 25. 8. 1936

Special Damage Fee (if any) £ 3 3 - Received by me 10. 10. 1936

Travelling expenses (if chargeable) £ : : 10. 10. 1936

Committee's Minute

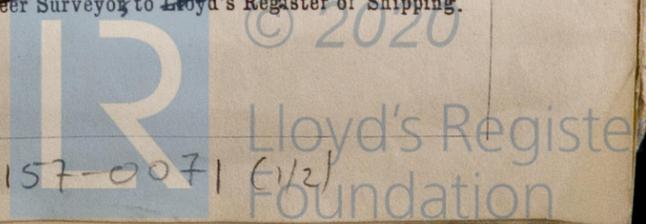
Assigned L.M.C. 8.36 Note Shaft.

GLASGOW 25 AUG 1936

W157-0071 (1/2)

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

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



Trip. Se. 4 Mot. "CERAMIC"

Alterations & Repairs.

- Port & Starboard propellers renewed complete, bases in cast iron with 3 blades in manganese bronze "SEMITAR" type. Mark :- LLOYD'S MR 31528.
- New 2-stage feed water heater fitted, taking steam from IP receiver, with all necessary new & altered piping. Tested in shop before fitting.
- Two air pumps converted from "Dual" to "Paragon" type by makers, vacuum augmenters fitted.
- Two condensers altered from 2 flow to 3 flow regenerative type. Tested on completion of work.
- Two circulating pumps fitted with balance weights, eccentricities altered & engines speeded up to give flow of 6,150 gallons/minute each pump.
- Port, Centre, Starboard stern bushes rewooded at fore & after ends.
- Port & Starboard HP. piston valve chambers bored, Lockwood & Carlisle rings fitted.
- "Lumberland" system removed from boilers. Zinc plates with necessary studs fitted.
- Throughout the boilers :-
- About 60 screwed stays renewed, 65 stay tubes renewed, 410 plain tubes renewed, numerous C.C. stay nuts renewed.
- Internal feed pipes renewed & end plates built up by SW in way where corroded.
- Combustion chamber internal stool rivets through shell renewed where corroded or broken.
- Corrosion at furnace sides cut out & built up by SW where necessary.
- Boiler stools & chocks reinforced or part renewed where necessary.
- 18 safety valve spring locating washers renewed.
- Forward boiler port, main check valve chest renewed.
- After centre boiler, circulating valve chest renewed.
- All mountings overhauled & parts renewed as found necessary.

W. D. Wether.

Electrical equipment examined under working conditions: Generators, motors, cables, fittings on main & auxiliary switchboards & fuse boards & boxes examined. All found or put in good order.

Repair & additions.

Main generator removed to works for overhaul, circuit breaker overhauled & repaired. New speed regulator fitted for each generator. All wiring in way of structural alterations removed & new wiring fitted in new accommodations & public rooms etc to Rule requirements. Remainder of electrical equipment, overhauled, repaired, or renewed as found necessary. On completion the whole installation was tested under full working conditions and found satisfactory.