

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

(Received at London Office 20 AUG 1942)

Date of writing Report 19.8.1942. When handed in at Local Office 19.8.1942 Port of London.

No. in Survey held at London Date First Survey 20.7.42 Last Survey 16.8.1942.

1564 on the Machinery of the ~~W. J. Tatem~~ Steel S.S. Chumleigh. (No. of Visits 11)Gross 5445 Vessel built at Sunderland By whom W. Pickersgill & Sons Ltd. When 1938 5
Net 3292 Engines made at Hartlepool By whom Richardsons Westgarth & Co Ltd When 1938Nominal 502 Boilers, when made (Main) 1938 (Donkey) 1938
Horse Power, 2 Owners Atlantic Shipping & Trading Co Ltd. Owners' Address
of Main Boilers 2 Managers W. J. Tatem Ltd. Port London. VoyageAux 1 If Surveyed Afloat or in Dry Dock Afloat - Surrey Millwall
Donkey Boilers 1 Main Boilers 220 (State name of Dock.) Dyr - Millwall.

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

CHARACTER. Date of last Survey and of Periodical Surveys. Machinery and Boiler Surveys (including date of N.B., if any).

100 A.1. with freeboard 8.41. L.M.C. 5.38 C.L. 7.41.

Periodical Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly 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 sides 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.

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. Yes - not Required.

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

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? Yes.

If this was not done, state for what reasons.

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?

State the latest date of internal examination of each boiler. Port 20/7/42. Starb. 21/7/42. Aft. 29/7/42. Present condition of funnel(s) Good.

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes. To what pressure were they afterwards adjusted under steam? 220 lbs/sq ins.

Did the Surveyor examine the Safety Valves of the Donkey Boiler? Yes. To what pressure were they afterwards adjusted under steam? 220 lbs/sq ins.

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

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

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

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

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

Has the shaft now fitted been previously used? Yes. 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? Yes.

State the date of examination of Screw Shaft. 28/7/42. State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft. 3/16".

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

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

Work done for B.S.: - The main and aux boilers examined internally and externally together with manholes, doors, fastenings and all mountings. Port main boiler tested hydraulically to 240 lbs/sq ins after repair. Safety valves on all boilers adjusted under steam to 220 lbs/sq ins. Boilers and mountings found in good order.

Boiler Repairs: - Port boiler centre comb. chamber wrapper plate cropped down each side at seam to tubeplate back to first row of screwed stays for 5'-9" Starb side and 5'-6" Port side. (See Over).

Seam completely rewelded. Some fractures in tube plate of flange built up by electric welding.

Work done for Damage stated caused by ice and grounding in ice river at Archangel between 9th Dec 1941 and 4th June 1942: - Vessel placed in drydock, propeller, outside fastenings, sea cock (opened up) and tail end shaft (drawn in) now examined. Windlass & steering engine 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, &c.; thus, for example, B.S. 9.11, B.&M.S. 9.11, L.M.C. 9.11, or L.M.C. 140 lb., E.D., &c.)

as now seen is in good and efficient condition, and eligible in our opinion to remain as classed with fresh record of B.S. 8.42.

Survey Fee (per Section 29) £ 4 0 0 Fees applied for

Special Damage or Repair Fee (if any) £ 3 3 0

Travelling expenses (if chargeable) £ 7 6

Committee's Minute TUE. 8 SEP 1942

Assigned B.S. 8.42

Received by me, 20 AUG 1942

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

W1163-0133

S. S. Chalmers

opened up for inspection and afterwards tried under working conditions.

Repair for damage:- Major repairs to steering engine, new piston rods & crosshead fitted to windlass. Propeller taken to Messrs Stones & addressed.

Also examined:- Watch condenser tested and made tight.

Re Boiler Repairs:- At first inspection of Port Main Boiler 20/7/42 one rivet in starboard side of the centre comb. chamber wrapper seam to tubeplate was found headless on the waterside. It was recommended that six rivets be drawn for inspection. All were found part fractured at bottom of counterplate. Rivetting of the complete seam was then recommended and when rivets were drawn the wrapper plate was found fractured between rivet holes down each side - fractures commencing at flying surface. A few fractures were found between rivet holes in the tube plate near bottom. Rivet holes in seam cast of 1/2" dia and holes distorted this amount. Repair carried out as stated on leaf - welding being done from both sides of plate and before the rivets were fitted. All holes repaired.

A sample of the defective plate has been taken and two of the defective rivets. These have been retained for investigation.

E. Crossley.

W. G. 5/42
partly removed in Port Boiler
acc. to pending damage
Propeller repairs.

2/8/42
2/7/42

