

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

Date of writing Report 31st Oct. 1943. When handed in at Local Office 11 - NOV 1943. Port of NEWCASTLE-ON-TYNE. No. in Survey held at 22545 on the Machinery of the Wood, Iron or Steel SE. DENEWOOD. Date. First Survey 2nd July 43 Last Survey 20th Oct. 1943. (No. of Visits 26). Tonnage Gross 7250 Net 4178 Vessel built at Sunderland By whom J. L. Thompson Son, Ltd. Engines made at - do - By whom N.E. Marine Eng. Co. Ltd. (1938/44). Boilers, when made (Main) (Donkey). Owners S. I. Jacobs & Co. Ltd. Managers. If Surveyed Afloat or in Dry Dock Yes. Blyth Dock & SB Co. Ltd. (State name of Dock.) Particulars of Classification which must be inserted precisely as in Register Book & Supplements).

Last Report No. Port Damage. Particulars of Examination and Repairs (if any) Damage. (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? Donkey

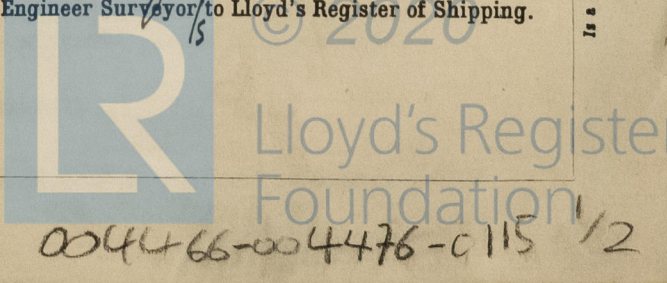
If not, state for what reasons. What parts of the Boilers could not be thus thoroughly examined? What special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler? State latest date of internal examination of each boiler. Present condition of funnel. Did the Surveyor examine the Safety Valves of the Main Boilers? To what pressure were they afterwards adjusted under steam? Did the Surveyor examine the Safety Valves of the Donkey Boilers? 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 Boilers? Did the Surveyor examine all the mountings of the Main Boilers? and of the Donkey Boilers? Has the screw shaft now been drawn and examined? Has it a continuous liner? Is an approved oil retaining appliance fitted at the after end? 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 oil retaining appliance fitted at the after end? State date of examination of Screw Shaft. State the wear down in the stern bush. Is electric light and/or power fitted? If 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? Engine parts, when referred to by numbers, should be counted from forward.

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done. Damage, all strokehold and Exhaust Tank & Bilge valves require to be opened, cleaned & examined. Main Shafting to be checked for alignment. The vessel has now left this port and the work for 'Damage' will be completed by Messrs South's Dock Co. Ltd. at North Shields.

Damage alleged to have been sustained through vessel having been sunk in River Wear after enemy action on 24th May 42. How done Damage - Propeller outside fastenings examined & found in good order. Main Engines completely dismantled, all cylinder lagging removed and all parts where contact with mud, thoroughly washed out & cleaned. All cylinders, pistons, valves, rods, main crankshaft, eccentrics, main bearings, top and bottom end bearings, pins & journals cleaned, examined & placed in good order. (See continuation sheet.)

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, BS 9,11, B&MS 9,11 or LMC 9,11 or LMC 140 lb., FD, &c.) This report is forwarded for the information of the Committee.

Survey Fee (per Section 29) £ : : Fees applied for 12 JAN 1944. Special Damage & Repair Fee (if any) £ 22 5 0 Received by me, John T. Linsley & John E. Martin. Travelling expenses (if chargeable) £ : : 19. Committee's Minute See minute on file machine room. Assigned



S. Donewood. M.A.S. /

All metallic rod packing removed, cleaned, re-adjusted to rods & refitted.

All main engine valve gear pins, bearings, links, tumblers etc, dismantled, cleaned of mud, examined, replaced & adjusted.

Columns washed out and all castings including columns, bedplate, cylinders, waterpump etc carefully examined for fractures.

Bedplate holding down bolts eased off, bedplate examined & holding down bolts hardened up. Checks examined & found in order.

Main Condenser opened out, thoroughly cleaned, tested & found tight.

Thrust and Tunnel shafting all completely opened out, cleaned of mud, examined & placed in good order.

Tail end shaft drawn in, examined & found in order.

Steamtrunk tested and found satisfactory.

Reversing & turning engines, all pumps & auxiliary machinery opened out, cleaned, examined, found & replaced in good order.

Dynamo, Fan Engines & Circulating pumps removed, sent to makers for cleaning & overhaul. Returners refitted.

Main and Aux injection pipes, all steam and exhaust pipes & all incomplete lines cleaned out of mud, examined & refitted.

Sea lock valves opened, cleaned, examined & found in good order.

All tank and bilge pipes throughout vessel tested and found & placed in good order.

Main Boilers - All boilers thoroughly washed & cleaned out. All tubes cleared of mud. Boilers dried out, examined internally and line traps placed in bottoms on completion.

All valves and mountings opened, cleaned, examined & found in good order.

All Boiler lagging (partly disturbed by submersion) stripped & boilers examined under hydraulic pressure 380 lbs found in order. Main steam pipes washed out, tested by hydraulic pressure & 380 lbs found in order.

Repairs Damage -

Crankshaft - placed in lathe and all journals where fretted by water, machined. All main bearings retapped to suit. Crankshaft rebored.

Coupling between LP & IP - holes re-bored & all new coupling bolts fitted & 3 top half main bearing renewed.

Thrust shaft placed in lathe - journals & collars machined where fretted with water. Both shaft bearings retapped. Pads retapped & adjusted.

All Tunnel shafting placed in lathe & journals machined where fretted by water. 2 coupling bolts renewed.

Tail end shaft examined in lathe and found in good order.

All shafting rebored and aligned.

A number of minor repairs and adjustments effected.

SUBSEQUENT DAMAGE REPAIRS CARRIED OUT AT SMITHS DOCK NORTH SHIELDS:

Intermediate shafting lined up (vessel afloat), alignment checked and found satisfactory.

Storehold and engine room tank & bilge lines, valves & chests cleaned out, examined & tested found sound & tight.

Main & auxiliary machinery examined under working conditions, found satisfactory.

All hold bilges filled and pumped out dry. Boilers examined under steam and their safety valves adjusted to working pressure 220 lbs/sq. in.