

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

(Received at London Office)

Date of writing Report 19 July When handed in at Local Office 11 July 1947 Port of SUNDERLAND
No. in Survey held at SUNDERLAND. Date, First Survey 3 September 1946 Last Survey 8 July 1947
eg. Book. on the Machinery of the Wood, Iron or Steel T.W. Sc. TANKER, M/V "ARMILLA". (No. of Visits 31)

Gross 3011. Vessel built at NEWCASTLE. By whom HAWTHORN LESLIE & CO. LTD. Year. Month. 1931 4.
Net 1626. Engines made at NEWCASTLE. By whom HAWTHORN LESLIE & CO. LTD. When 1931.
Nominal 380. Boilers, when made (Main) (Donkey) 1931.
of Main Boilers 1. Owners NEDERL - INDISCHE TANK STOOMBOOT MAATSCHAPPIJ Owners' Address (if not already recorded in Appendix to Register Book.)
of Donkey Boilers 1.58. Managers Port WILLEMSTAD. Voyage
Main Pressure- 1.58. Surveyed Afloat or in Dry Dock GREENNELLS, D.D. & CO. LTD. Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).
Donkey Boilers 150 lbs.

Report No. Port Particulars of Examination and Repairs (if any) DOCKING, L.M.C. TS. DBS.

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.

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.

as a damage report made by anyone else? If so, by whom?

the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? YES.

this, was not done, state for what reasons?

what parts of the Boilers could not be thus thoroughly examined?

to 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?

the latest date of internal examination of each boiler 30.4.47. Present condition of funnel? Good.

the Surveyor examine the Safety Valves of the Main Boiler? To what pressure were they afterwards adjusted under steam?

the Surveyor examine the Safety Valves of Donkey Boiler? YES. To what pressure were they afterwards adjusted under steam? 150 lbs/d.

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

the Surveyor examine the drain plugs of the Main Boilers? YES, and of the Donkey Boilers?

the Surveyor examine all the mountings of the Main Boilers? YES, and of the Donkey Boilers?

screw shaft now been drawn and examined? P.S. YES. Is it fitted with continuous liner? P.S. YES. Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? NO.

shaft now been changed? YES. If so, state reasons LINER WORN IN WAY OF GLAND.

the shaft now fitted been previously used? NO. 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? NO.

date of examination of Screw Shaft P.S. 2.5.47. State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft P.S. Close.

Engine parts, when referred to by numbers, should be counted from forward. Is electric light and power fitted? YES.

did the Surveyor examine the generators, motors, switchgear, cables and fuses? YES.

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

the Survey is not complete, state what arrangements have been made for its completion and what remains to be done COMPLETE. L.M.C. CS NOW H.O.

Following parts opened up examined and found in good condition. All cylinder liners, pistons, rods, covers, valves, gear and supercharge casings

All crossheads, guides, crankpins, brasses, journals, bearings, thrust & intermediate shafts, attached pumps with valves & connections, compressor cylinders, liners, pistons, rods, covers, valve crankpin & journal

AUXILIARIES: Kromhout engine (30hp) with attached compressor all parts complete.

Kromhout engine (10hp) all parts complete.

Steam generator with attached emergency compressor, all parts complete.

All auxiliary pumps. All starting & injection air receivers cleaned and examined internally.

All main & auxiliary intercoolers, lubricating oil & water coolers cleaned and tested.

Daily service tank cleaned and examined internally. Condenser tested. Steam pipes tested Pumping arrangements.

Oil fuel burning installation, windlars, steering engine, sea connections, electrical installation

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, E.&M.S. 9.11, L.M.C. 9.11, or L.M.C. 140 lb., F.D., &c.)

The machinery of this vessel as now seen is eligible in my opinion to remain as classed in the Register Book, with fresh record of survey L.M.C. CS. 7.47. DBS. 7.47 and port & starboard screwshafts (c) seen P.S. 47. S.N. 547.

Survey Fee (per Section 29) DBS £ 4 : 0 : 0. Fees applied for See by 19

Special Damage or Repair Fee (if any) LMC 20 8 - Received by me, 19

Travelling expenses (if chargeable) LMC 5 10 -

Committee's Minute 29 AUG 1947 + LMC 7.47 Port S. 5.47 DBS 7.47

Assigned 29 AUG 1947

CERTIFICATE WRITTEN 002206-002214-0716 2

Lloyd's Register Foundation

CONTINUED.TANKER. M/V "ARMILLA"D.B.S.

Donkey boiler examined internally, and externally with its mountings, doors & fastenings, also tube plates when all plain tubes removed, and found or placed in good condition.

Examined under water pressure 170 lbs/sq in on completion of repairs found tight and in good condition, also under steam and its safety valves adjusted to working pressure as stated.

Oil fuel burning installation opened up and examined found or placed in good condition, examined under working conditions, deck controls tried found in good working condition, oil discharge pipes found tight and in good condition.

T.S.

Port and starboard screw shafts drawn in and examined.

Port screw shaft found liner worn in way of gland, liner machined and replaced.

Starboard screw shaft found liner worn in way of gland, liner machined and shaft replaced on board as spare.

Spare screw shaft (unused) examined and found in good condition now fitted to starboard side.

2 new liners ^{ORDERED} ~~supplied~~ for fitting at some future date.

REPAIRS W&T.

PORT MAIN ENGINE: Nos 2, 3, 4 cylinder heads and liners renewed.

STAR " " Nos 1, 2, 3, 5, 6 " " " "

P.S. " " fuel pumps reconditioned by Hawthorn Leslie.

" " " all piston rings renewed, all inlet & exhaust valves reconditioned.

PORT " " attached circulating water pump cover renewed.

STAR " " " " " " " " rod and bucket renewed.

" " " " " " " " bilge pump ram renewed.

P.S. " " compressor intercoolers cleaned and tested.

Oil fuel transfer pump, piston & bucket rings renewed.

Aux piston C.W. pump, piston rods & rings renewed, slide valve renewed, chest face machined.

Forward main feed pump valve chest reconditioned by Hobbs.

Aft " " " " " " " " steam cyl bored, piston rings renewed.

Oil fuel burning pump, piston & bucket rings renewed, oil heater casing renewed.

Main engine lub oil pumps (attached) p.s. driving spindles renewed.

Ballast pump, piston rod renewed, discharge valve chest renewed complete.

Lan engine piston valve & spindle renewed.

Steam dynamo engine piston rings renewed also governor valve.

Kromhout C.W. pump, pump body renewed, suc & del valve seats renewed, water end liners renewed & buckets skimmed.

Aux Condenser, all tubes removed, cleaned & replaced, examined under water test, found tight.

Steering engine piston valves & spindles renewed, piston rods skimmed control valve spindle renewed.

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

All plain tubes renewed (84)

34 combustion chamber stays renewed

Minor adjustments carried out on mountings. Spare gear placed in good order.