Rpt. 9.

No. 33403

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

(Received at London Office _____)

Date of writing Report May 26 1942 When handed in at Local Office 27 MAY 1942 Port of SUNDERLAND.

No. in Y. Book. 4910 Survey held at Sunderland Date, First Survey May 1st Last Survey May 23rd 1942 (No. of Visits 13)

on the Machinery of the ~~Wood, Iron or~~ Steel HARTLEBURY

Tonnage { Gross 5082 / Net 3035

Nominal Horse Power 472

No. of Main Boilers (Sft) 2

Auxiliary Boiler 1

No. of Donkey Boilers —

Steam Pressure— Main Boilers 220 lbs

Auxiliary Boiler 220 lbs

Donkey Boilers

Vessel built at Port Glasgow By whom Lithgows Ld When 1934 (Year. Month.) 3

Engines made at Glasgow By whom D Rowan & Co Ld When 1934

Boilers, when made (Main) 1934 (Donkey) Aux 1934

Owners National S S Co Ld Owners' Address (if not already recorded in Appendix to Register Book.)

Managers J & C Harrison Ld Port London Voyage

If Surveyed Afloat or in Dry Dock Afloat (Dickinsons Quay) (State name of Dock.)

Last Report No. _____ Port _____

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

CHARACTER. ✠ for Special Survey Date of last Survey and of Periodical Surveys.	Years assigned now expired.	Machinery and Boiler Surveys (including date of N.B., if any).
✠ 100 A1 1,42		✠ LMC
		MS 3,38
SS SRL No 1 — 38		BS 10,41
		CL 8,41

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

Particulars of Examination and Repairs (if any) Boiler Repairs & SRL

Periodical Surveys, when held, must be reported in detail and seriatim 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 has 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? Yes

" " Auxiliary ~~Donkey~~ " " Yes

If this was not done, state for what reasons? ✓

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

In 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 Main Boilers 4/5/42 Auxiliary Boiler 6/5/42 Present condition of funnel(s) ✓

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 Boilers? ✓

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

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 shaft now been changed? ✓ If so, state reasons ✓

Is the shaft now 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? ✓

Date of examination of Screw Shaft ✓ State the distance between lignum vitæ or bearing metal of stern bush and top of after bearing of screw shaft ✓

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

Is electric light and/or power fitted? ✓

Why 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.? ✓

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

At the request of the Owners superintendent examined both main boilers & Auxiliary boiler internally with furnaces & combustion chambers. Noted active corrosion taking place on Combustion Chamber back plates around necks of screw stays & various places on wrapper plates, combustion chamber tops & on line of firebars on Starboard boiler & to a lesser extent on Port boiler & Auxiliary boiler. Maximum depth of corrosion was 3/16" on back plate of Centre Combustion Chamber of Starboard boiler, also tube leakage in Combustion Chambers. All furnaces were gauged. Port Boiler Centre furnace was found to be 1¾" down & was dealt with as stated below & all other furnaces found slightly distorted but not considered sufficient to be dealt with at this time.

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 ✠LMC 140 lb., F.D., &c.) CS 3,34,

as now seen is efficient & in safe working condition & eligible in my opinion to remain as classed without fresh Record.

(Reference to Exhaust Turbo Compressor might be deleted from Special Reasons List)

Survey Fee (per Section 29) £ : 3 : 3

Special Repair Fee (if any) (per Section 29.) £ : ✓ :

Travelling expenses (if chargeable) £ : ✓ :

Fees applied for 27 MAY 1942 19

Received by me, _____ 19

J Grieve

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 19 JUN 1942

Signed As now

Without Cond.

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

K44-0034

REPAIRS :-

Port Boiler. Centre Furnace jacked up. All tubes re-expanded in combustion chamber. All surfaces where corrosion was taking place was thoroughly scaled & wire brushed & coated with a suitable anti-corrosive mixture.

Starboard Boiler. All tubes re-expanded. 17 screw stays through Combustion Chamber back plates renewed (5 Port 7 Centre & 5 Starboard). These stays were removed for access for scaling & wire brushing of corroded parts on back plates. All surfaces where corrosion was taking place were thoroughly scaled & wire brushed & coated with a suitable anti-corrosive mixture. It may be noted that the Centre Furnace of this boiler was jacked up at last Boiler Survey & while it is meanwhile considered to be efficient it has been recommended to re-examine this furnace at the next Boiler Survey (October 1942).

Auxiliary Boiler. 12 tubes re-expanded in Port Combustion Chamber. All surfaces where corrosion was taking place were thoroughly scaled & coated with a suitable anti-corrosive mixture.

All superheat elements removed from Main boilers & sent to N.E.M. (Wallsend) for overhaul & refitted.
Steam tests observed on superheat elements in place & found tight.

Hydraulic Test carried out on Main Boilers (Hydraulic Test 230 lbs/□") & found in order.

S R L :- Exhaust Turbo Compressor refitted after overhaul at makers.

REPAIRS FOR "WEAR & TEAR"
Low Pressure Engine Slide valve face & false face machined true.
High Pressure Engine Steam & Exhaust valves overhauled.
After Centrifugal Pump. New Piston rod fitted & piston rings renewed.

J Grieve