

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

(Received at London Office)

19 AUG 1950

NEWCASTLE-on-TYNE

Date of writing Report.....19..... When handed in at Local Office.....11.4.JUL.1950.....19..... Port of.....

No. in Survey held at Wallsend/Tyne Date. First Survey Mar 20 Last Survey June 29 19 50  
 7. Book. (No. of Visits.....35.....)

504 on the Machinery of the Wood, Iron or Steel S.S. ESSO LIVERPOOL ex John D. Archibald

Gross 14539 Vessel built at Newport News USA By whom Newport News Shipbldg & R.D. Co. When 1921  
 Net 8683 Engines made at Newport News USA By whom Newport News Shipbldg & R.D. Co. When 1921  
 Nominal 858 Boilers, when made (Main) 1921 (Donkey) ✓  
 Horse Power of Main Boilers 3 Owners Anglo American Oil Co Ltd Owners' Address (if not already recorded in Appendix to Register Book.)  
 of Donkey Boilers ✓ Managers Loro Transportation Co Port London Voyage ✓  
 Steam Pressure 200 lb/sq in Surveyed Afloat & in Dry Dock Swan Hunter's Dry Dock & Quay  
 in Donkey Boilers ✓ (State name of Dock.)

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

Report No. Port

Particulars of Examination and Repairs (if any) Classification: LMC: TS:

Periodical Surveys, when held, must be reported in detail and verbatim 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.

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?

Donkey

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?

What 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 the 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 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?

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

Now Done for Classification: LMC:

Vessel in drydock, examined propellers, tailshafts (drawn in) stern bushes, all sea cocks & valves & all outside fastenings.

Examined opened up, all Main Engine (PDS) cylinders, liners, covers, pistons, rods, guides, top & bottom end bearings & pins, main bearing & journals, crankshafts, thrust shafts & bearings, & intermediate shafts bearings, all attached pumps, & condensers (tested)

Examined opened up, all main & aux. feed pumps, two circulating pumps, bilge, ballast & butterworth & sand fire pumps, three dynamo engines, two fan engines, two O.F. unit pumps & heaters & O.F. transfer pump, 7" bilge & transfer pumps, pumping arrangements, O.F. arrangements, & portable fire extinguishing arrangements, steering engine & windlass engine, & electrical installation, evaporators, & feed heaters.

P.T.O.

General Observations, Opinion, and Recommendation:— The Machinery of this vessel so far as

(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, LMC 9.11 or LMC 140 lb., PD, &c.)

Now seen is in an efficient condition, & eligible in my opinion to be classed with the records LMC 6/50, TS (PDS) 6/50, fitted for O.F. flash point above 150°F. Subject to the electrical installation being placed in good order.

Survey Fee (per Section 22) Classification LMC X2 £64 0 0

Special Alteration Repair Fee (if any) £30 0 0

Travelling expenses (if chargeable) £3 3 0

Fees applied for

18 AUG 1950

Received by me,

Committee's Minute

Assigned

LMC 6.50 subject

5 (5m) 6.50

James H. Walker R.P. Storey

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

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

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



LMC Continued:

Port, Centre & Starboard main boilers examined internally & externally together with all doors & fastenings, mountings & Safety Valves, the latter afterwards adjusted under steam to the above pressure. Steam pipes exam'd & tested as per rule requirements.

The machinery & boilers were built & installed under the supervision of the American Bureau of Shipping. All scantlings of Boilers & Machinery checked as far as practicable & found to confirm with the approved drawings. Alterations & adjustments made as <sup>per</sup> Secretary's letter.

Wear & Tear Repairs & Alterations:

All P & S main bearings remetalled, <sup>crank</sup> shafts satisfactorily bedded in, & all shafting satisfactorily lined up.

All Bottom end bearings remetalled.

P & S stern bushes rewooded.

P. tailshaft found satisfactory.

S. tailshaft found fractured at top end of cone, 1" aft of end of liner.

Spare tailshaft now fitted. Satisfactorily fitted in propeller. This shaft stamped:- Record: Beth. Hob. Yard.

AB: 120: CSS: 31/8/48: CUE: 4015.

Port stern tube found deteriorated at bottom & in way of lower gland stud holes.

Stem tube bored out  $\frac{1}{2}$ " at 1" on the diam. & faced off.

Depth of boring was 1" less than depth of gland box.

Cast iron sleeve with flange, machined & fitted into boring. Fastened with collar gland studs. Gland renewed.

This repair was considered efficient & permanent.

Attached bilge pumps:- Ram skimmed, neck & gland bushes renewed.

P & S circulating pumps, removed. Seatings renewed.

Impeller shafts renewed.

No 1. Generator Shaft, journals skimmed true, bearings remetalled. & coupling renewed.

San'd Bilge Pump: Liners & crossheads & rods renewed.

Windlass Engine: All crankshaft journals skimmed true, bearings remetalled.

& Driving shaft pinions rebushed.

Aft feed Pump: Renewed slide valve chest & valves.

Ballast Pump sea suction valve renewed. (tested)

Boiler Mountings:-

All Scum & blow down valves originally screw lift valves, now altered to Non return valves.

Test Valves on boiler now changed to test cocks.

See follower.

J. Walker



Boiler Mountings: Repairs & Alterations Contd...

All Water gauge double shut Valves & gauge fittings, removed & Klinger cocks fitted.

All Water gauge columns modified & tested for fitting of cocks

Other mountings Various lids & seats renewed.

Steam pipes removed, examined, & tested as per rule requirements.

Tailshaft liners specially examined at point of fusion & found in good order.

On completion of all repairs & alterations the main & auxiliary machinery were examined under working conditions alongside the Quay, Accumulation tests carried out on all boilers, steam smothering, & foamite, connections operated, & O.F. system deck controls tried, and all found in good order.

J.W. Walker

SURVEYOR TO LLOYD'S REGISTER,  
NEWCASTLE-ON-TYNE.

Note:- Donkey Boiler was removed from the vessel at this time, at the Owner's request.

It is understood that this boiler is to be scrapped.

J.W.

SURVEYOR TO LLOYD'S REGISTER,  
NEWCASTLE-ON-TYNE.