

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

(Received at London Office)

THU. OCT. 14 1920

Date of writing Report 2nd Oct 1920 When handed in at Local Office 4/10/1920 Port of West Hartlepool
 No. in Reg. Book 59320 Survey held at West Hartlepool Date, First Survey 22nd June Last Survey 10th Oct 1920
on the Machinery of the Wood, Iron or Steel S.S. "Graciana" Master (No. of Visits 17)
 Tonnage { Gross 3536 Vessel built at Glasgow By whom C Connell & Co Ltd When 1903-10
 { Net 2283 Engines made at Glasgow By whom D Rowan & Co When 1903
 Registered Horse Power 364 Boilers, when made (Main) 1903 (Donkey) 1920
 No. of Main Boilers 2 Owners Furness Withy & Co Ltd Port W. Hartlepool Voyage
 No. of Donkey Boilers 1 If Surveyed Afloat or in Dry Dock Middleton
 Steam Pressure in Main Boilers 185 (State name of Dock.)
 in Donkey Boilers 120

Last Report No. Port

Particulars of Examination and Repairs (if any) Dam. LMC & N.D.B.

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? no 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

Do. " Donkey " no

If this was not done, state for what reasons? Donkey boiler new now

And 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?

Did the Surveyor examine the Safety Valves of the Main Boiler? yes

To what pressure were they afterwards adjusted under steam? 185-lb

Did the Surveyor examine the Safety Valves of Donkey Boiler? yes

To what pressure were they afterwards adjusted under steam? 120 lb

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? yes

, and of the Donkey Boiler? yes

Did the Surveyor examine the drain plugs of the Main Boilers? yes

, and of the Donkey Boiler? none

Did the Surveyor examine all the mountings of the Main Boilers? yes

, and of the Donkey Boiler? yes

Has screw shaft now been drawn and examined? yes Is it fitted with continuous liner? yes or two liners? ✓ or is it without liners? ✓

Has shaft now been changed? no If so, state reasons ✓

Is the shaft now fitted new? ✓ Has it a continuous liner? ✓ or two liners? ✓ or is it without liners? ✓

State the distance between lignum vitae of stern bush and top of after bearing of screw shaft? 7 1/2" full.

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

Survey for damage due to grounding, and for L.M.C.
 The vessel placed in dry dock and machinery opened out and examined including cylinders, pistons and slide valves, crank, thrust tunnel and screw shafts, propeller stem bush and outside fastenings, the condenser, pumps and sea connections, also the two main boilers inside and outside with their safety valves and mountings. The steam steering gear examined.

The following repairs effected for damage.

L.P. astern guide shoe re-metalled

Crank shaft lifted, the bottom bearings dressed and lined up.

General Observations, Opinion, and Recommendation:—This vessel's machinery is (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, or L.M.C. 9.11, 140 lb., F.D., &c.)

now in good and safe working condition and eligible to remain as classed and to have fresh record of survey

L.M.C. 10.20., S. 10.20 and N.D.B. 20

Survey Fee (per Section 28) £ 5 10 0 Fees applied for 13/10/1920
 Special Damage or Repair Fee (if any) £ 15 15 0
 (per Section 28.) W.J. repairs & N.D.B.
 Travelling Expenses (if chargeable) £ 4 4 0 Received by me, 28/10/20

R.D. Philston

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + L.M.C. 10.20
and as repl. comdr
N.D.B. 20

MACHINERY CERT
 WRITTEN 3/11/20



Lloyd's Register

WOB 10365/12

Damage through pounding. Screw shaft
drawn crank shaft - welded shafts aligned
whole of the engines examined & number of
repairs effected

S. 102 due 12.19 113 due 9.20 not held &
a new donkey Boiler fitted

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 10.20
without special restriction

S. 10.20.

N.D.B 20 x p. 1206

L.L.
19/10/20

N.B.-If this Report is copied by Copying Press, especial care must be taken that the copying paper is not so much damped as to spread the ink, or to cause it to show through to the other side.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.



© 2021

Lloyd's Register
Foundation

S.S. "Graciana"

and the crank shaft re bedded.

No 4 & 6 main bearings top halves re metalled.

H.P. & L.P. crank pin brasses re metalled.

Two thrust shoes re metalled.

M.P. & L.P. ahead eccentric straps re metalled.

Alignment of shafting adjusted.

The circulating pump chamber re bored and the bucket renewed.

The forward tube plate of condenser rejointed.

The main steam pipes annealed, several flanges re brazed, and the pipes tested to twice the working pressure.

The propeller was found loose, the key broken in two and a piece of the side of the keyway in the shaft broken.

The shaft has been removed ashore, a piece of the after end of the liner turned off, the broken side of the keyway, which comes wholly within the propeller, repaired by electric welding, and the propeller re fitted. The key renewed.

The general service and ballast donkey pumps overhauled and put in order.

On completion the machinery tried under steam.

The following repairs have been done for wear and tear.

M.P. & L.P. slide rods skimmed and neck and gland bushes renewed. Feed pump rams renewed.

Bilge pump rams skimmed and neck and gland bushes renewed. The condenser patched internally at the lower part at the joint face for the forward tube plate.

Condenser tubes renewed.

Thrust shoes adjusting screws renewed.

Main injection valve spindle renewed.

In the main boilers a little electric welding repairs done in the centre combustion chambers of both boilers, and the port chamber of the port boiler.

One screwed stay renewed.

The old donkey boiler removed and a new one fitted marked No 3693. For particulars see Sunderland report No 27879.

The boiler has been fitted and secured in place on the main deck. The old mountings overhauled & refitted. The boiler tried under steam and safety valves adjusted.

R.D. Philston.