

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

(Received at London Office

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of writing Report 21-11-1941 When handed in at Local Office 21-11-1941 Port of Manchester.
in Survey held at Manchester Date, First Survey 20-10-41 Last Survey 14-11-1941
Book. 152 on the Machinery of the Wood, Iron or Steel S.S. "EMPIRE BUFFALO" (No. of Visits 10)
age { Gross 6704 Vessel built at Seattle, Wash. By whom Skinner & Eddy, Corp. When 1919
Net 4618 Engines made at Hamilton, O. By whom Brown, Durand & Kuntzschler When 1919
Main Boilers 3 Boilers, when made (Main) 1919 (Donkey)
Donkey Boilers 1 Owners Ministry of War Transport. Owners' Address (if not already recorded in Appendix to Register Book.)
Main Boilers 210 1/2 lb. Managers Lyle Shipping Co. Ltd. Port London Voyage
Donkey Boilers 1 Surveyed Afloat or in Dry Dock N° 1 D.D. Inverleith Park, (State name of Dock.) Trafford Park & Leeds & Harrogate Manchester.

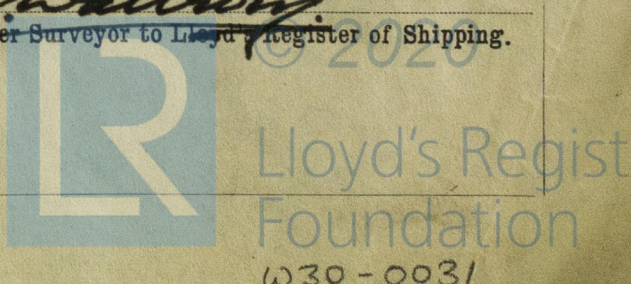
st Report No. Port
rticulars of Examination and Repairs (if any) B.S. Machinery Repair
odical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the
se of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on
unt of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and
des being detailed in the body of the report, should be briefly summarised at the end of the report. State also the
s and initials of any letters respecting this case.
amage cases where the Surveyor has not made a special damage report he is required to state whether he
ffered his services for this purpose, and why they were declined

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 (Classification Contemplated) Examined 10.40 12.40.		BS 10.40 CL 6.40
Noted for oil fuel		

a damage report made by anyone else? If so, by whom?
he Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? YES
Donkey
was not done, 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
veyor to assure himself of the thorough efficiency of those parts of each Boiler?
latest date of internal examination of each boiler PORT & STED 27-10-41. CENTRE 6-11-41. Present condition of funnel(s) Efficient.
he Surveyor examine the Safety Valves of the Main Boiler? YES. To what pressure were they afterwards adjusted under steam? 210 2 1/2 lb.
he Surveyor examine the Safety Valves of Donkey Boiler? YES. To what pressure were they afterwards adjusted under steam?
he Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? YES. and of the Donkey Boilers?
he Surveyor examine the drain plugs of the Main Boilers? None fitted. and of the Donkey Boilers?
he Surveyor examine all the mountings of the Main Boilers? YES. and of the Donkey Boilers?
crew shaft now been drawn and examined? NO. 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?
shaft now been changed? NO If so, state reasons 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 vitae 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?
did the Surveyor examine the generators, motors, switchgear, cables and fuses?
he insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms?
Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete

ow done for Docking
Vessel placed in dry dock, propeller, after end of stern
bush and all outside fastenings examined.
It was noted that the distance between the top of the screwshaft and the
lignum vitae of the stern bush was 1/32". The flange of the stern
bush was 3/16" clear of the screwshaft at the bottom.
The Chief Engineer stated that no vibration of the shaft or stern
gland leakage had been noted.
In view of the present wear down, it is considered that special attention
should be given to the working of the stern bush at the next dry docking, (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
L.M.C. 140 lb., F.D., &c.)
CS 3,34,
as far as now run, is, in my opinion, in an efficient condition
and eligible to remain as now classed in the Register Book and to
have a fresh record of BS, 11, 41 subject to the working of the stern bush
receiving special attention at the next dry docking.

roy Fee (per Section 29) £ 4 : 0 : 0 Fees applied for 20 11 1941
LICENCE CASE £
ial Damage or Repair Fee (if any) £
(per Section 29.)
velling expenses (if chargeable) £
Committee's Minute
signed B.S. 11. 41
Subject



which, the Owner's representative stated, would be within the ensuing twelve months.

The shaft is considered efficient in the meantime.
Owing to congestion of shipping in the port, no facilities were available for reworking at this time.

How done for B.S. 11, 41

The port, centre and starboard main boilers were examined internally and externally together with all their mountings and fastenings.

The safety valves of all boilers were adjusted under steam to the pressure stated above, and the oil burning installation was examined under working conditions.

How done for B.S. Repairs

A new main check valve was fitted on the centre boiler on account of seat distortion and cutting.

The new valve was examined under an hydraulic test pressure of 500 lbs/sq. in. and found satisfactory.

Leakage in way of the bolt straps was noted on all boiler shells in the region of the boiler supports.

The seams were carefully examined and ^{the rivets} hammer tested and found efficient. Light caulking was sufficient to stop the leakage.

Other minor wear and tear repairs were effected.

How done for Machinery Repairs.

The steam cylinders of the air pumps were removed ashore and machined in way of the valve faces on account of heavy wear.

All working parts of the forced feed water pump were examined and the pump liner was found slack. This liner was secured by fitting a stop plate at the top of the cylinder.

All working parts of the inboard dynamo and the auxiliary circulating water pump were examined and minor wear and tear repairs effected.

It is recommended that any of the above parts of the machinery not previously dealt with for the reclassification survey, be counted towards that survey.

D. Whallum