

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 29-3-1943 When handed in at Local Office 30-3-1943 Port of GLASGOW  
 No. in Survey held at Paisley Date, First Survey 8-7-1941 Last Survey 26-3-1943  
 Reg. Book 106 (Number of Visits 31)  
 on the Steel Single Screw "EMPIRE JOAN" Tons { Gross 203 Net NIL  
 Built at Selby By whom built Messrs. Buchan & Sons Ltd. Yard No. 1262 When built 1943  
 Engines made at Paisley By whom made Messrs. McKie & Baxter Engine No. 1336 When made 1943  
 Boilers made at Hull By whom made Messrs. Amos & Smith Boiler No. 719 When made 1943  
 Registered Horse Power \_\_\_\_\_ Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_  
 Nom. Horse Power as per Rule 106 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted -  
 Trade for which vessel is intended Towing

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 101  
 Dia. of Cylinders 13 3/4 - 24 - 38" Length of Stroke 24" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 4.298" Crank pin dia. 7 5/8" Mid. length breadth 11 3/4" Thickness parallel to axis 4 7/8"  
as fitted 7 5/8" Crank webs 4 7/8" shrunk Thickness around eye-hole 3 7/16"  
 Intermediate Shafts, diameter as per Rule 6.942" Thrust shaft, diameter at collars as per Rule 7.298"  
as fitted \_\_\_\_\_ Tube Shafts, diameter as per Rule \_\_\_\_\_ Screw Shaft, diameter as per Rule 8 1/4" Is the tube shaft fitted with a continuous liner yes  
as fitted \_\_\_\_\_ Bronze Liners, thickness in way of bushes as per Rule 35 5/16" Thickness between bushes as per Rule 27 1/64" Is the after end of the liner made watertight in the  
as fitted 9 1/16" propeller boss. yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length  
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes  
 If two liners are fitted, is the shaft lapped or protected between the liners. - Is an approved Oil Gland or other appliance fitted at the after end of the tube  
at \_\_\_\_\_ If so, state type - Length of Bearing in Stern Bush next to and supporting propeller 2'-9"  
 Propeller, dia. \_\_\_\_\_ Pitch \_\_\_\_\_ No. of Blades \_\_\_\_\_ Material \_\_\_\_\_ whether Moveable \_\_\_\_\_ Total Developed Surface \_\_\_\_\_ sq. feet  
 Feed Pumps worked from the Main Engines, No. 1 Diameter 3 1/4" Stroke 12" Can one be overhauled while the other is at work ✓  
 Bilge Pumps worked from the Main Engines, No. 1 Diameter 3 1/4" Stroke 12" Can one be overhauled while the other is at work ✓  
 Feed Pumps { No. and size 2-6" x 8 1/2" x 13" Pumps connected to the { No. and size -  
 { How driven Steam Main Bilge Line { How driven -  
 Ballast Pumps, No. and size 1-6" x 6" x 6" (Duplex) Lubricating Oil Pumps, including Spare Pump, No. and size -  
 Are two independent means arranged for circulating water through the Oil Cooler - Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps:—In Engine and Boiler Room - In Pump Room - In Holds, &c. -

MAIN BOILERS, &c.—(Letter for record \_\_\_\_\_) Total Heating Surface of Boilers 1950 sq. ft.  
 Which Boilers are fitted with Forced Draft Natural draught Which Boilers are fitted with Superheaters -  
 No. and Description of Boilers 1- S. E. Working Pressure 200 lbs/sq. in.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? See Hull Report  
 IS A DONKEY BOILER FITTED? - If so, is a report now forwarded? -  
 Can the donkey boiler be used for domestic purposes only ✓  
 PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers See Hull Report Auxiliary Boilers - Donkey Boilers -  
 (If not state date of approval) Superheaters ✓ General Pumping Arrangements - Oil fuel Burning Piping Arrangements -

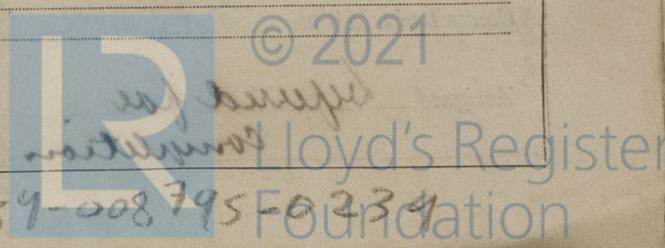
### SPARE GEAR.

Has the spare gear required by the Rules been supplied yes  
 State the principal additional spare gear supplied -

The foregoing is a correct description.

FOR MCKIE & BAXTER LIMITED

Manufacturers.



008789-008795-0234

Is a Report also sent on the Hull of the Ship? If not, state whether, and when, one will be sent.

NOTE.—The words which do not apply should be deleted.

2m T 11.41. MCC. (MADE IN ENGLAND.)

Dates of Survey while building  
 During progress of work in shops: 1941 Jul 8-31, Sep 20-29, Oct 6-15, 29 Nov 4, 1942 Feb 16-23, Mar 5-12, 26 May 5-19, 23 Jun 1-11, Aug 12, Sep 2  
 During erection on board vessel: 1941 Mar 19, Apr 16, 1942 Jan 13-20, 21 Mar 16, 1942 26  
 Total No. of visits: 11

Dates of Examination of principal parts—Cylinders 14-10, 16-12-42 Slides 2-9-42 Covers 12-8-42  
 Pistons 11-6-42 Piston Rods 2-9-42 Connecting rods 11-6-42  
 Crank shaft 12-8-42, 20-1-43 Thrust shaft - Intermediate shafts - 101  
 Tube shaft - Screw shaft 14-10-42; 10-12-42 Propeller -  
 Stern tube 10-12-42 Engine and boiler seatings - Engines holding down bolts -  
 Completion of fitting sea connections -  
 Completion of pumping arrangements - Boilers fixed - Engines tried under steam -  
 Main boiler safety valves adjusted - Thickness of adjusting washers -  
 Crank shaft material O. H. Steel Identification Mark LLOYDS No 10633 5B 7-10-41 Thrust shaft material - Identification Mark -  
 Intermediate shafts, material - Identification Marks - Tube shaft, material - Identification Mark -  
 Screw shaft, material DH Steel Identification Mark LLOYDS No 11189 1-3825 4A 15-3-42 Steam Pipes, material - Test pressure - Date of Test -  
 Is an installation fitted for burning oil fuel No. Is the flash point of the oil to be used over 150° F. -  
 Have the requirements of the Rules for the use of oil as fuel been complied with -  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo - If so, have the requirements of the Rules been complied with -  
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with -  
 Is this machinery duplicate of a previous case? Yes. If so, state name of vessel Yb Rpt no 66850

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been constructed under Special Survey in accordance with the Rule Requirements, & approved plans. The materials & workmanship are good. The machinery has been forwarded to Hull, for installation in a vessel building by Messrs Cochrane & Sons Ltd, Selby Yard no 1262 A/MS.504 & will be eligible in our opinion for record of + LMC (date) when it has been satisfactorily fitted on board, & tried under working conditions.

Certificate to be sent to  
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee	£ 3	When applied for,
Special 2/5 Gps	£ 10 : 12	6 APR 1943
Donkey Boiler Fee	£ :	When received,
Travelling Expenses (if any)	£ :	10

R. J. Eastrope  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 6 APR 1943

Assigned by order for completion

FRI. 28. MAY 1943

