

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office.

Date of writing Report 29<sup>th</sup> July 1947 When handed in at Local Office 30<sup>th</sup> July 1947 Port of Gretnock.  
 No. in Survey held at Port Glasgow Date, First Survey 5/6/47 Last Survey 24-7-1947  
 Reg. Book 85418 on the S/S "YEWFOREST" (ex "Empire Yenchueh" - 46) Tons {Gross 1047  
 Net 569  
 Built at Albion By whom built J. LEWIS & SONS LTD. Yard No.          When built 1945  
 Engines made at Albion By whom made J. LEWIS & SONS LTD Engine No.          When made 1945  
 Boilers made at Paisley By whom made A.F. CRAIG & CO LTD Boiler No.          When made 1945  
 Registered Horse Power          Owners JOHN STEWART & CO SHIPPING LTD Port belonging to Glasgow  
 Nom. Horse Power as per Rule 129.4 MN-130 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES  
 Trade for which vessel is intended COASTING.

ENGINES, &c.—Description of Engines STEAM TRIPLE EXPANSION. Revs. per minute           
 Dia. of Cylinders 14" - 24" - 40" Length of Stroke 24" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 7.715" Crank pin dia. 7.75" Crank webs Mid. length breadth 15" Thickness parallel to axis 5"  
as fitted 7.45" Mid. length thickness 5" shrunk Thickness around eye-hole 3.625"  
 Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as per Rule 7.715"  
as fitted NONE as fitted 7.75"  
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 8.62 Is the          shaft fitted with a continuous liner No.  
as fitted as fitted 9.25  
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the  
as fitted as fitted 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           
 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 YES If so, state type NEWARK Length of Bearing in Stern Bush next to and supporting propeller 34"  
 Propeller, dia. 10'-8" Pitch 11'-9" VAR. No. of Blades 4 Material G.I. whether Moveable No Total Developed Surface          sq. feet  
 Feed Pumps worked from the Main Engines, No. Two Diameter 2 1/2" Stroke 14" Can one be overhauled while the other is at work YES  
 Bilge Pumps worked from the Main Engines, No. Two Diameter 2 3/4" Stroke 14" Can one be overhauled while the other is at work YES  
 Feed Pumps { No. and size ONE VERTICAL DUPLEX 6" x 4 1/2" x 6" Pumps connected to the Main Bilge Line { No. and size ONE 4" x 8" x 8"  
 How driven STEAM How driven STEAM  
 Ballast Pumps, No. and size ONE VERTICAL DUPLEX 7" x 8" x 8" 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 2 @ 2 1/2" : 1 @ 3" In Holds, &c. N<sup>o</sup> 1 Hold 2 @ 2 1/2" N<sup>o</sup> 2 Hold 2 @ 2 1/2" 3" @ outflow  
but 2 1/2" nests holes.  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size ONE @ 4" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size ONE @ 3" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes YES  
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES  
 Are all Sea Connections fitted direct on the skin of the ship YES Are they fitted with Valves or Cocks BOTH  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates YES Are the Overboard Discharges above or below the deep water line ABOVE  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel YES Are the Blow Off Cocks fitted with a spigot and brass covering plate YES  
 What Pipes pass through the bunkers NONE How are they protected           
 What pipes pass through the deep tanks          Have they been tested as per Rule YES  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YES  
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one  
 compartment to another YES Is the Shaft Tunnel watertight No TUNNEL Is it fitted with a watertight door          worked from         

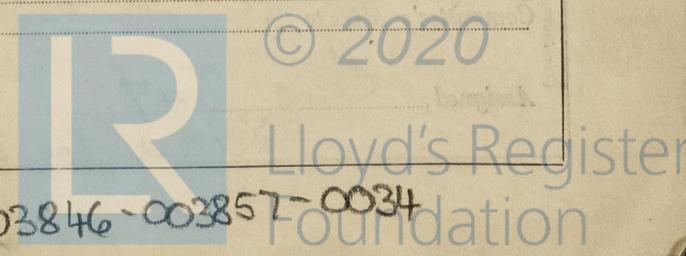
MAIN BOILERS, &c.—(Letter for record         ) Total Heating Surface of Boilers 1953 ft<sup>2</sup>  
 Which Boilers are fitted with Forced Draft MAIN BOILER Which Boilers are fitted with Superheaters NONE  
 No. and Description of Boilers ONE SINGLE END MULTITUBULAR CYLINDRICAL Working Pressure 200 lbs sq"  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES  
 IS A DONKEY BOILER FITTED? No 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 NOTED 28-5-46 Main Boilers NOTED 28-5-46 Auxiliary Boilers          Donkey Boilers           
 (If not state date of approval)  
 Superheaters          General Pumping Arrangements NOTED 28-5-46 Oil fuel Burning Piping Arrangements APPROVED 9-5-47

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.

Manufacturer.



Dates of Survey while building

- During progress of work in shops - -
- During erection on board vessel - - -
- Total No. of visits

Dates of Examination of principal parts—Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft Propeller

Stern tube Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements Boilers fixed Engines tried under steam 23<sup>rd</sup> July 47.

Main boiler safety valves adjusted 23<sup>rd</sup> July 1947. Thickness of adjusting washers Port 9/32" Star 23/64"

Crank shaft material Identification Mark Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test

Is an installation fitted for burning oil fuel YES Is the flash point of the oil to be used over 150° F. YES

Have the requirements of the Rules for the use of oil as fuel been complied with YES

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No 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. If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. 'YEWFOREST' (ex 'EMPIRE FENCHURCH') Built to B.C. Class.

The Machinery & Boiler of this vessel was built under survey by the British Corporation Register. At the special request of the Owners Representative & with the view of classification with this Society Machinery & Boiler have now been completely opened up & examined. As far as seen the workmanship appears satisfactory, all materials sound & good throughout & efficiently installed on board. The vessel has been converted to Oil Fuel Burning at this time, all work being found upon completion satisfactory, in accordance with approved plan & Section 20 of the Rules (1946-7) as far as these were applicable. (Cyde Fuel System, Unit No: 2804).

The Machinery & Boiler was examined under working conditions at sea where the Main engine was worked up to full power for approximately 2 hours & found satisfactory. Boiler safety valves were adjusted under steam to 200 lbs/sq", casing gear tested & found efficient.

The Machinery & Boiler of this vessel are eligible in my opinion to be Classed in the Register Book with the notation L.M.C. 7-47; 15.B. (200 lbs/sq"); Screwshaft O.G. & fitted for oil fuel 7-47 flash point above 150°F.

The above particulars are submitted for the information of the Committee.

Certificate to be sent to

The amount of Entry Fee	£	:	:	When applied for,
Special Classification	£ 32	:	0	2 <sup>nd</sup> AUG. 1947.
Oil Fuel Installation	£ 8	:	0	
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	£	:	:	19

A. G. Sinclair  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 26 AUG 1947

Assigned Sinc 7.47

Fitted for oil 7.47 F.P. above 150°F

