

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report *31<sup>st</sup> March, 1926* When handed in at Local Office *31<sup>st</sup> March 1926* Port of *Aberdeen*  
 No. in Survey held at *Aberdeen* Date, First Survey *30<sup>th</sup> June, 1925*, Last Survey *30<sup>th</sup> March, 1926*  
 Reg. Book. on the *S.S. "HORLEY"* (Number of Visits *30*)  
 Built at *Aberdeen* By whom built *J. Lewis & Sons, Ltd.* Yard No. *95* Tons { Gross *929*  
 Engines made at *Aberdeen* By whom made *J. Lewis & Sons, Ltd.* Engine No. *162* Net *494*  
 Boilers made at *Aberdeen* By whom made *J. Lewis & Sons, Ltd.* Boilers Nos. *141 + 142* when made *1926*  
 Registered Horse Power Owners *E. J. Lindley* Port belonging to *London*  
 Nom. Horse Power as per Rule *140* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *No*

## ENGINES, &amp;c.—Description of Engines

*Triple Expansion*  
 Dia. of Cylinders *15 $\frac{3}{4}$  - 27 - 44 $\frac{1}{2}$*  Length of Stroke *30"* Revs. per minute *97* No. of Cylinders *3* No. of Cranks *3*  
 Dia. of Crank shaft journals as per rule *8.63* as fitted *8 $\frac{3}{4}$*  Dia. of Crank pin *8 $\frac{3}{4}$*  Crank webs Mid. length breadth *12 $\frac{1}{2}$*  Thickness parallel to axis *6"*  
 Diameter of Thrust shaft under collars as per rule *8.63* as fitted *8 $\frac{3}{4}$*  Diameter of Tunnel shaft as per rule *8.22* as fitted *None fitted* Diameter of Screw shaft as per rule *9.178* as fitted *9 $\frac{1}{2}$*  Is the Screw shaft  
 fitted with a continuous liner the whole length of the stern tube *Yes* Is the after end of the liner made watertight in the propeller boss *Yes*  
 If the liner is in more than one length are the joints burned *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 *fits whole length*  
 If two liners are fitted, is the shaft lapped or protected between the liners *No* Is an approved appliance fitted at the after end of the shaft to permit  
 of it being efficiently lubricated *No* Length of Stern Bush *3'-2"* Diameter of Propeller *11'-6"*  
 Pitch of Propeller *13'-3"* No. of Blades *4* State whether Moveable *No* Total Surface *49* square feet.  
 No. of Feed Pumps fitted to the Main Engines *2* Diameter of ditto *3"* Stroke *16 $\frac{1}{2}$ "* Can one be overhauled while the other is at work *Yes*  
 No. of Bilge Pumps fitted to the Main Engines *2* Diameter of ditto *3"* Stroke *16 $\frac{1}{2}$ "* Can one be overhauled while the other is at work *Yes*  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps *One 5'3 $\frac{1}{2}$ 'x6' + One 7'x7'x8'*  
 No. and size of Pumps connected to the Main Bilge Line *One 7'x7'x8'*  
 No. and size of Ballast Pumps *One 7'x7'x8'* No. and size of Lubricating Oil Pumps, including Spare Pump *None*  
 Are two independent means arranged for circulating water through the Oil Cooler *None* No. and size of suctions connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps;—In Engine and Boiler Room *2 @ 2 $\frac{1}{2}$ "* and in Holds, &c. *2 @ 3"*

No. and size of Main Water Circulating Pump Bilge Suctions *One @ 4"* No. and size of Donkey Pump Direct Suctions  
 to the Engine Room Bilges *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, as far as practicable*  
 Are all connections with the sea direct on the skin of the ship *Yes* Are they 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 Discharge Pipes 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 are carried through the bunkers *Bilge Suctions* How are they protected *below ceiling*  
 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 Screw Shaft Tunnel watertight *None* Is it fitted with a watertight door *—* worked from *—*

MAIN BOILERS, &c.—(Letter for record *S*) Total Heating Surface of Boilers *2378* <sup>*258*</sup> *sq. ft.*  
 Is Forced Draft fitted *No* No. and Description of Boilers *Two Single Ended* 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? *—*PLANS. Are approved plans forwarded herewith for Shafting *No* Main Boilers *Yes* Auxiliary Boilers *—* Donkey Boilers *—*General Pumping Arrangements *Yes* Oil Fuel Burning Piping Arrangements *None*

SPARE GEAR. State the articles supplied:—*All as per Rule Requirements and, in addition, two safety valve  
 springs, one set of air pump valves, one set of circulating pump valves, six boiler tubes, six  
 condenser tubes and twenty-four ferrules, and one propeller.*

The foregoing is a correct description,  
 FOR JOHN LEWIS & SONS, LTD.

*John J. Dowling*  
 Sign.

Manufacturer.



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Lloyd's Register  
 Foundation

W1153-0172



6 - APR 1926

Dates of Survey while building

During progress of work in shops - - 1925 - JUNE 30. AUG. 3.19. SEP. 2.11.17. OCT. 12.23. NOV. 4.18. DEC. 1.3.10.30.

During erection on board vessel - - 1926 - JAN. 12.25. FEB. 3.9.19.24. MAR. 2.13.

1926 - MAR. 15.16.18.20.23.24.29.30.

Total No. of visits 30

Dates of Examination of principal parts - Cylinders 30.12.25 Slides 24.2.26

Covers 30.12.25 Pistons 24.2.26 Rods 9.2.26

Connecting rods 9.2.26 Crank shaft Finished at Forge 18.11.25 Thrust shaft 25.1.26

Tunnel shafts None fitted Screw shaft 30.12.25 Propeller 30.12.25

Stern tube 30.12.25 Engine and boiler seatings 2.3.26 Engines holding down bolts 29.3.26

Completion of pumping arrangements 29.3.26 Boilers fixed 20.3.26 Engines tried under steam 29.3.26 30.3.26

Completion of fitting sea connections 2.3.26 Stern tube 19.2.26 Screw shaft and propeller 2.3.26

Main boiler safety valves adjusted 29.3.26 Thickness of adjusting washers P. BOILER S. BOILER P 1/4" S 1/2" P 1/2" S 1/2"

Material of Crank shaft Steel Identification Mark on Do. LLOYD'S N° 896. J.H.M. 15.2.21

Material of Thrust shaft Steel Identification Mark on Do. LLOYD'S N° 7458 H.C.F. 25.1.26.

Material of Tunnel shafts None Identification Marks on Do. -

Material of Screw shafts Iron Identification Marks on Do. LLOYD'S N° 4016 H.C.F. 30.12.25

Material of Steam Pipes 90 Copper ✓ Test pressure 400 lbs./sq. in. ✓ Date of Test 23.3.26

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 carrying and burning oil fuel been complied with -

Is this machinery duplicate of a previous case No ✓ If so, state name of vessel. -

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 rules and approved plans; the materials and workmanship are good. The machinery has been efficiently installed on board the vessel, examined under full working conditions and found satisfactory, and is eligible, in my opinion, for classification, and to have the record L.M.C. 3.26 C.L. in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 3.26. C.L.

*Chas. J. W. D.*  
7/4/26

Certificate to be sent to Ship Office

The amount of Entry Fee ... £ 3 : 0 : 0 When applied for, Special ... £ 35 : 0 : 0 31.3.19.26

Donkey Boiler Fee ... £ : : When received, Travelling Expenses (if any) £ : : 31.5.26

*A. B. Forster*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute WED. 7 APR 1926

Assigned *L.M.C. 3.26 C.L.*

CERTIFICATE WRITTEN



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