

# REPORT ON OIL ENGINE MACHINERY.

No. 90337

-5 AUG. 1926

Received at London Office

Date of writing Report July 28<sup>th</sup> 1926 When handed in at Local Office 19 Port of London  
 No. in Survey held at Faversham Date, First Survey April 20<sup>th</sup> Last Survey July 3<sup>rd</sup> 1926  
 Reg. Book. 75608 Number of Visits Five

Single }  
 Twin }  
 Triple }  
 Quadruple } Screw vessel "LIDO" Tons { Gross \_\_\_\_\_  
 Net \_\_\_\_\_  
 Built at Faversham By whom built James Collock & Sons Ltd. Yard No. 1194 When built 1926  
 Engines made at Manchester By whom made L. Gardner & Sons Ltd. Engine No. 26736 When made 1926  
 Donkey Boilers made at \_\_\_\_\_ By whom made \_\_\_\_\_ Boiler No. \_\_\_\_\_ When made \_\_\_\_\_  
 Brake Horse Power 150 Owners Union Lighterage Co. Ltd. Port belonging to London  
 Nom. Horse Power as per Rule 43 Is Refrigerating Machinery fitted for cargo purposes  Is Electric Light fitted Yes  
 Trade for which vessel is intended \_\_\_\_\_

**OIL ENGINES, &c.**—Type of Engines \_\_\_\_\_ 2 or 4 stroke cycle \_\_\_\_\_ Single or double acting \_\_\_\_\_  
 Maximum pressure in cylinders \_\_\_\_\_ Diameter of cylinders \_\_\_\_\_ Length of stroke \_\_\_\_\_ No. of cylinders \_\_\_\_\_ No. of cranks \_\_\_\_\_  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge \_\_\_\_\_ Is there a bearing between each crank \_\_\_\_\_  
 Revolutions per minute \_\_\_\_\_ Flywheel dia. \_\_\_\_\_ Weight \_\_\_\_\_ Means of ignition \_\_\_\_\_ Kind of fuel used \_\_\_\_\_  
 Crank Shaft, dia. of journals \_\_\_\_\_ as per Rule \_\_\_\_\_ Crank pin dia. \_\_\_\_\_ Crank Webs \_\_\_\_\_ Mid. length breadth \_\_\_\_\_ Thickness parallel to axis \_\_\_\_\_  
 as fitted \_\_\_\_\_ Mid. length thickness \_\_\_\_\_ slunk \_\_\_\_\_ Thickness around eyehole \_\_\_\_\_  
 Flywheel Shaft, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Intermediate Shafts, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Thrust Shaft, diameter at collars \_\_\_\_\_  
 as fitted \_\_\_\_\_ as fitted \_\_\_\_\_ as fitted \_\_\_\_\_  
 Tube Shaft, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Screw Shaft, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Is the tube \_\_\_\_\_ screw \_\_\_\_\_ shaft fitted with a continuous liner \_\_\_\_\_  
 as fitted \_\_\_\_\_ as fitted \_\_\_\_\_ as fitted \_\_\_\_\_  
 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 \_\_\_\_\_  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner \_\_\_\_\_  
 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 \_\_\_\_\_  
 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 shaft \_\_\_\_\_ Length of Bearing in Stern Bush next to and supporting propeller \_\_\_\_\_  
 Propeller, dia. \_\_\_\_\_ Pitch \_\_\_\_\_ No. of blades \_\_\_\_\_ Material \_\_\_\_\_ whether Moveable \_\_\_\_\_ Total Developed Surface \_\_\_\_\_ sq. feet  
 Method of reversing Engines \_\_\_\_\_ Is a governor or other arrangement fitted to prevent racing of the engine when declutched \_\_\_\_\_ Means of lubrication \_\_\_\_\_  
 Thickness of cylinder liners \_\_\_\_\_ Are the cylinders fitted with safety valves \_\_\_\_\_ Are the exhaust pipes and silencers water cooled or lagged with  
 non-conducting material \_\_\_\_\_ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine \_\_\_\_\_  
 Cooling Water Pumps, No. \_\_\_\_\_ Is the sea suction provided with an efficient strainer which can be cleared within the vessel \_\_\_\_\_  
 Bilge Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 Pumps connected to the Main Bilge Line { No. and Size \_\_\_\_\_ One - 2 3/8" x 3" \_\_\_\_\_ One - Centrifugal \_\_\_\_\_  
 How driven \_\_\_\_\_ Main Engines \_\_\_\_\_ Aux. Sani Diesel N° 26823 \_\_\_\_\_  
 Ballast Pumps, No. and size \_\_\_\_\_ One Cargo Pump \_\_\_\_\_ Lubricating Oil Pumps, including Spare Pump, No. and size \_\_\_\_\_ See Inch. Rpt. N° 5857 \_\_\_\_\_  
 Are two independent means arranged for circulating water through the Oil Cooler \_\_\_\_\_ Yes \_\_\_\_\_ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
 Pumps, No. and size:—In Machinery Spaces \_\_\_\_\_ 2 @ 2" \_\_\_\_\_  
 In Holds, &c. \_\_\_\_\_ None \_\_\_\_\_  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size \_\_\_\_\_ 2 @ 2" \_\_\_\_\_  
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes \_\_\_\_\_ Yes \_\_\_\_\_ Are the Bilge Suctions in the Machinery Spaces  
 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 \_\_\_\_\_ Locks. \_\_\_\_\_  
 Are they sized sufficiently high on the ship's side to be seen without lifting the platform 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 \_\_\_\_\_  
 What pipes pass through the bunkers \_\_\_\_\_ Yes \_\_\_\_\_ How are they protected \_\_\_\_\_  
 What pipes pass through the deep tanks \_\_\_\_\_ Yes \_\_\_\_\_ Have they been tested as per Rule \_\_\_\_\_  
 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 \_\_\_\_\_ Yes \_\_\_\_\_ Is it fitted with a watertight door \_\_\_\_\_ worked from \_\_\_\_\_  
 If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork \_\_\_\_\_ Yes \_\_\_\_\_  
 Main Air Compressors, No. \_\_\_\_\_ See Inch. Rpt. N° 5857 \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
 Auxiliary Air Compressors, No. \_\_\_\_\_ One \_\_\_\_\_ No. of stages \_\_\_\_\_ 2 \_\_\_\_\_ Diameters \_\_\_\_\_ Rawel N° 18176 \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_ Aux. Sani Diesel \_\_\_\_\_  
 Small Auxiliary Air Compressors, No. \_\_\_\_\_ No. of stages \_\_\_\_\_ Diameters \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
 Scavenging Air Pumps, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Driven by \_\_\_\_\_  
 Auxiliary Engines crank shafts, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ See Inch. Rpt. N° 5857 \_\_\_\_\_  
 as fitted \_\_\_\_\_

**AIR RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve as per Rule \_\_\_\_\_  
 Can the internal surfaces of the receivers be examined \_\_\_\_\_ What means are provided for cleaning their inner surfaces \_\_\_\_\_  
 Is there a drain arrangement fitted at the lowest part of each receiver \_\_\_\_\_  
 High Pressure Air Receivers, No. \_\_\_\_\_ See Inch. Rpt. N° 5857 \_\_\_\_\_ Cubic capacity of each \_\_\_\_\_ Internal diameter \_\_\_\_\_ thickness \_\_\_\_\_  
 Seamless, lap welded or riveted longitudinal joint \_\_\_\_\_ Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_  
 Starting Air Receivers, No. \_\_\_\_\_ Total cubic capacity \_\_\_\_\_ Internal diameter \_\_\_\_\_ thickness \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_  
 Seamless, lap welded or riveted longitudinal joint \_\_\_\_\_ Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_



002427-002434-0117

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

See Encl. Rpt. No. 5857

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building: During progress of work in shops - April 20th, 29th, June 2nd, July 19th + 21st, Aug. 3rd. During erection on board vessel - 6. Total No. of visits - 6.

Dates of Examination of principal parts: Cylinders, Crank shaft, Flywheel shaft, Thrust shaft, Intermediate shafts, Pistons, Rods, Connecting rods, Tube shaft, Propeller, Stern tube, Engine seatings, Engines holding down bolts, Completion of fitting sea connections, Completion of pumping arrangements, Engines tried under working conditions. Identification Marks for Crank shaft, Thrust shaft, Tube shaft, Flywheel shaft, Intermediate shafts, Screw shaft.

Is the flash point of the oil to be used over 150° F. Is this machinery duplicate of a previous case. If so, state name of vessel.

General Remarks: The Main & Auxiliary Machinery having been installed on board this vessel in accordance with the Society's requirements and tried under working conditions is eligible, in my opinion, for classification and to have the record of +L.M.C. 7, 26.

It is submitted that this vessel is eligible for THE RECORD. +L.M.C. 8-26.

oil engines 2 S.C.P.A. 20. 6/8/26. 3 cy. 13 1/4 - 15 43 N.H.P. L. Gardner & Sons Ltd.

Arthur Palmer for self & R.J. Drackin

The amount of Entry Fee ... £ : : When applied for, Special ... £ 3 : 8 : 5.8.1926 Donkey Boiler Fee ... £ : : When received, Travelling Expenses (if any) £ 3-19-6 6-8-1926

H.C. Murray, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Assigned +L.M.C. 8-26 Oil Engines



Rpt. 4b Date of writing No. in Survey Reg. Book. on the Built at Engines made Donkey Boiler Brake Horse Nom. Horse Power Trade for what OIL ENGINES Maximum pressure Span of bearings, Revolutions per minute Crank Shaft, Flywheel Shaft Tube Shaft, Bronze Liners, propeller boss If the liner does If two liners are end of the tube Propeller, dia. Method of rev. Light crank shafts. Maintenance only non-conducting Cooling Water Bilge Pumps Pumps connected Ballast Pumps Are two independent Engines Boiler No. For 50.11.21. AIR RECI Can the internal Is there a drain High Pressure Seamless, lap welded Starting Air Seamless, lap welded