

## REPORT ON OIL ENGINE MACHINERY.

No. 80205

Received at London Office

11 MAR 1926

15/3/26 Port of

NEWCASTLE-ON-TYNE

Date of writing Report

When handed in at Local Office

Date, First Survey 24 Oct. 1924 Last Survey 5 MARCH 1926

No. in Survey held at WALKER &amp; WALSEND

Number of Visits 110

Reg. Book.

1986 on the Twin Screw vessels MOTOR SHIP. ATHELKING

Tons: Gross 9557  
Net 6018

Built at WALLSEND

By whom built SWAN, HUNTER, WIGHAM, RICHARDSON &amp; CO. Ltd. Yard No. 1285 When built 1926

Engines made at WALKER

By whom made S. H. W. R. L. D.

Engine No. 1208 When made 1926

Donkey Boilers made at WALKER

By whom made S. H. W. R. L. D.

Boiler No. 1208 When made 1926

Brake Horse Power

Owners BRITISH MOLASSES CO. LTD. Port belonging to LIVERPOOL

COMBINED ENGINES

Nom. Horse Power as per Rule 1051

Is Refrigerating Machinery fitted for cargo purposes NO

Is Electric Light fitted YES

581-1208-

Type of Engines TWIN SCREW NEPTUNE MARINE OIL ENGINE 2 stroke cycle 2 Single or double acting SINGLE

Maximum pressure in cylinders 500 lb. No. of cylinders 6 Diameter of cylinders 22 1/2" No. of cranks 2 x 6 Length of stroke 45"

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 33 7/8" Is there a bearing between each crank YES

Revolutions per minute Flywheel dia. 6' 8 1/4" Weight 6.2 TONS Means of ignition COMPRESSION Kind of fuel used HEAVY OIL

Crank Shaft, dia. of journals as per Rule 15.07" as fitted 15 5/8" Crank pin dia. 15 5/8" Crank Webs Mid. length breadth shrunk Thickness parallel to axis 103/16" Mid. length thickness Thickness around eyehole 7 15/16"

Flywheel Shafts, diameter as per Rule 15.07" as fitted 15 5/8" Intermediate Shafts, diameter as per Rule 11.58" as fitted 11.75" Thrust Shaft, diameter at collars as per Rule 12.15" as fitted 12.25"

Tube Shafts, diameter as per Rule 12.83" as fitted 13.375" Is the shaft fitted with a continuous liner YES

Bronze Liners, thickness in way of bushes as per Rule 67" as fitted 75" Thickness between bushes as per Rule 503" as fitted 687" 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 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 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 shaft NO Length of Bearing in Stern Bush next to and supporting propeller 4' 5 1/2" sq. feet

Propeller, dia. 15' 0" Pitch 12' 6" No. of blades 4 Material BRONZE whether Moveable NO Total Developed Surface 75 sq. feet

Method of reversing Engines COMPRESSED Is a governor or other arrangement fitted to prevent racing of the engine when detached YES Means of lubrication

FORCED Thickness of cylinder liners 15 7/8" Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material LAGGED 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. 6 - SALT WATER DRIVEN FROM M.E. / STANDBY PISTON &amp; JACKET FRESH WATER PUMP (INDEP) Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Bilge Pumps fitted to the Main Engines, No. 2 Diameter 3 3/4" Stroke 27" Can one be overhauled while the other is at work YES

Pumps connected to the Main Bilge Line No. and size ONE BALLAST (DUPLEX) 9 x 11 x 10" ONE G.S. 6 x 6 x 6" ONE BILGE PUMP FORWARD

How driven STEAM Lubricating Oil Pumps, including Spare Pump, No. and size 2 - 8 x 9 x 18"

Ballast Pumps, No. and size ONE 9 x 11 x 10" Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Are two independent means arranged for circulating water through the Oil Cooler YES

Pumps, No. and size:—In Engine and Boiler Room 3 of 3 1/2" one 2 1/2"

Holds, &amp;c. 2 of 2 1/2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ONE OF 3 1/2"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes YES Are the Bilge Suctions in the Machinery Space

Are they fitted with Valves or Cocks BOTH

Are all Sea Connections fitted direct on the skin of the ship YES Are they fixed 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 BOTH

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

How are they protected

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

apartment to another YES Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. 2 No. of stages 3 Diameters 24"-21 3/4"-4 5/8" Stroke 26" Driven by MAIN ENGINES

Auxiliary Air Compressors, No. ONE No. of stages 3 Diameters 16 1/2"-9"-4 1/2" Stroke 9 1/2" Driven by STEAM ENGINE

Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

Exhausting Air Pumps, No. FOUR Diameter 40" Stroke 27" Driven by MAIN ENGINES

Auxiliary Engines crank shafts, diameter as per Rule as fitted NONE FITTED

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES

Are the internal surfaces of the receivers be examined YES What means are provided for cleaning their inner surfaces MAN HOLE DOOR

Is there a drain arrangement fitted at the lowest part of each receiver YES

High Pressure Air Receivers, No. SIX Cubic capacity of each 17.65 CUB FEET Internal diameter 17 3/4" thickness 5/8"

Unless, lap welded or riveted longitudinal joint WELDLESS, DRAWN STEEL Range of tensile strength 29/33 TONS Working pressure by Rules 1005 lb

Starting Air Receivers, No. FOUR Total cubic capacity 600 CUB FEET Internal diameter 3'-3" thickness 3/32" 2020

Unless, lap welded or riveted longitudinal joint RIVETED Material STEEL Range of tensile strength 30/34 TONS Working pressure by Rules 602 lb



If so, is a report now forwarded? **YES**

Sept. 5

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