

## REPORT ON OIL ENGINE MACHINERY.

No. 20914

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No. in Survey held at Greenock Date, First Survey 11<sup>th</sup> April 1938 Last Survey 17-3-1939

Reg. Book 88802 on the Single m/s "Karr" Screw vessel Number of Visits 77

Tons Gross 8500  
Net

Built at Greenock By whom built Blythwood Steel Co. Ltd. Yard No. 53 When built 1939

Engines made at Greenock By whom made J. & A. Macdonald & Co. Ltd. Engine No. 1120 When made 1939

Donkey Boilers made at ditto By whom made ditto Boiler No. K120 When made 1939

Brake Horse Power 3000 Owners Western Oil Shipping Co. Ltd. Port belonging to London

Nom. Horse Power as per Rule 503 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended Foreign

OIL ENGINES, &c.—Type of Engines Diesel Under Pressure Submergence (B.W. Type) or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 600 lbs Diameter of cylinders 6.50 in Length of stroke 4.00 in No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 118 lbs/sq. in Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 8.44 in Is there a bearing between each crank Yes

Revolutions per minute 114 Flywheel dia. 22.18 in Weight 2.19 tons Means of ignition Compression Kind of fuel used Diesel

Crank Shaft, Solid forged dia. of journals as per Rule 4.41.59 in Crank pin dia. 4.60 in Crank Webs Mid. length breadth 7.50 in Thickness parallel to axis 2.64 in  
Semi built as fitted 4.60 in Mid. length thickness 2.64 in shrunk Thickness around eyehole 2.05 in  
All built

Flywheel Shaft, diameter as per Rule 4.41.59 Intermediate Shafts, diameter as per Rule 12.386 Thrust Shaft, diameter at collars as per Rule 13.0065  
as fitted 1.8 in as fitted 2.4 in as fitted 1.8 in

Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule 13.636 Is the tube shaft fitted with a continuous liner Yes  
as fitted as fitted 1.8 in

Bronze Liners, thickness in way of bushes as per Rule 7.2 Thickness between bushes as per Rule 5.4 Is the after end of the liner made watertight in the propeller boss Yes  
as fitted 7.8 in as fitted 1.16 in

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 No If so, state type — Length of Bearing in Stern Bush next to and supporting propeller 5.0 in

Propeller, dia. 5.0 Pitch 11.6 No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 82.6 sq. feet

Method of reversing Engines Air Is a governor or other arrangement fitted to prevent racing of the engine when disengaged Yes Means of lubrication Forced

Thickness of cylinder liners 4.0/4.5 in 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 Funnel

Cooling Water Pumps, No. 4 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Bilge Pumps worked from the Main Engines, No. One Diameter Return Stroke 3.5 in Can one be overhauled while the other is at work —

Pumps connected to the Main Bilge Line No. and Size 2. (4+8+8) (8+8+10) 10 35 lbs per sq. in.  
How driven Steam Main engine

Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements —

Ballast Pumps, No. and size 1- 8+8+10 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2. (Return 10) (1.8+8+10)

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 3 at 3 1/2 in 2 at 2 1/2 in (as per Rules) In Pump Rooms 7 at 2 1/2 in

In Holds, &c. For hold 2 at 2 1/2 in For pump flat 2 at 2 1/2 in

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2. 5 1/2 in

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 Both

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 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 None 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 None 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 —

Main Air Compressors, No. Two No. of stages 2 Diameters 4+9 1/4 in Stroke 7 1/2 in Driven by Steam Engines

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

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

What provision is made for first Charging the Air Receivers Steam driven compressors

Scavenging Air Pumps, No. — Diameter — Stroke — Driven by —

Auxiliary Engines crank shafts, diameter as per Rule No. —  
as fitted Position

Have the Auxiliary Engines been constructed under special survey — Is a report sent herewith —



