

REPORT ON OIL ENGINE MACHINERY.

No. 12414

Received at London Office

-2 DEC 1931

Survey Report of November 1931 When handed in at Local Office

Port of **AMSTERDAM**

Survey held at **AMSTERDAM**

Date, First Survey **4 July 1930** Last Survey **14 November 1931**

Number of Visits **52**

XXXX
XXXX
XXXX

Screw vessel

"MAJA"

Tons { Gross **8268**
Net **4867**

Amper

By whom built **N.V.C.v.d.Giessen&Zonen's** Schps. **618** Yard No. **618** When built **1931**

Amsterdam

By whom made **Werkspoor N.V.** Engine No. - When made **1931**

made at **Amsterdam**

By whom made **Werkspoor N.V.** Boiler No. - When made **1931**

power **4000**

Owners **Petroleum Maats. "La Carena"** Port belonging to **The Hague**

as per Rule **73 714** Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted **Yes**

vessel is intended

S, &c.—Type of Engines **Werkspoor Supercharged Diesel 2 or 4 stroke cycle** Single or double acting

Number of cylinders **5404** Diameter of cylinders **630mm** Length of stroke **1100mm** No. of cylinders **6 12** No. of cranks **6**

Distance from Crank to the Crank, measured from inner edge to inner edge **840mm** Is there a bearing between each crank **Yes**

Flywheel dia. **2260mm** Weight **6600kg** Means of ignition **Self igniting** Kind of fuel used **Sea oil**

Journal diameters as per Rule **410mm** as fitted **410mm** Crank pin dia. **410mm** Crank Webs Mid. length breadth **140mm** Thickness parallel to axis **240mm**

Intermediate Shafts, diameter as per Rule **350mm** as fitted **350mm** Thrust Shaft, diameter at collars as per Rule **300mm** as fitted **300mm**

Screw Shaft, diameter as per Rule **315mm** as fitted **315mm** Is the shaft fitted with a continuous liner **Yes**

Thickness in way of bushes as per Rule **18 1/2 - 19mm** as fitted **15mm** Is the after end of the liner made watertight in the

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner **one length**

Is the space between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive **tight fit**

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**

Length of Bearing in Stern Bush next to and supporting propeller **1400mm**

Pitch **3150mm** No. of blades **3** Material **Brass** whether Moveable **no** Total Developed Surface **53** sq. feet

Means of lubrication **air driven with a governor or other arrangement fitted to prevent racing of the engine when declutched** **Yes**

Are the cylinders fitted with safety valves **Yes** Are the exhaust pipes and silencers water cooled or lagged with **lagged**

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine **to prevent**

Is the sea suction provided with an efficient strainer which can be cleared within the vessel **Yes**

Can one be overhauled while the other is at work **Yes**

Lubricating Oil Pumps, including Spare Pump, No. and size **2 Ballast pumps, 2 Ballast pumps, Steam driven, rotary pumps, cap. 25 tons each**

Oil Cooler **Yes** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

In Machinery Spaces **3 1/2"** In Pump Room **2 x 2 1/2"**

Direct Suctions to the Engine Room Bilges, No. and size **1-5" and 1-6 1/2" Carburetor 8, 25, 10"**

Are the Bilge Suctions in the Machinery Spaces

Are they fitted with Valves or Cocks **valves**

Are the Overboard Discharges above or below the deep water line **Yes, below**

Are the Blow Off Cocks fitted with a spigot and brass covering plate **Yes**

How are they protected **Hammer steel pipe with valves against buckling to be controlled from deck**

Have they been tested as per Rule **Yes**

Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **Yes**

Are 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

Is the Shaft Tunnel watertight **Yes** Is it fitted with a watertight door **Yes** worked from **Yes**

Means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork **Yes**

Compressors, No. **2** No. of stages **3** Diameters **520-520-180** Stroke **450mm** Driven by **M. Motor**

Compressors, No. **1** No. of stages **3** Diameters **18 3/4-11 1/2-5** Stroke **12"** Driven by **Steam**

Compressors, No. **1** No. of stages **1** Diameters **1** Stroke **1** Driven by **1**

Compressors, No. **1** Diameter **1** Stroke **1** Driven by **1**

Receivers, diameter as per Rule **410mm** as fitted **410mm** **Amsterdam Report No. 11815**

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 and cleaned **Yes** Is a drain fitted at the lowest part of each receiver **Yes**

Pressure Air Receivers, No. **2** Cubic capacity of each **400L** Internal diameter **450mm** thickness **21mm**

Are they welded or riveted longitudinal joint **Hammer** Material **Steel** Range of tensile strength **50/54/44** Working pressure **by Rules 1425kg Actual 1900kg**

Air Receivers, No. **4** Total cubic capacity **1400 cub ft** Internal diameter **1395mm** thickness **10mm**

Are they welded or riveted longitudinal joint **riveted** Material **Steel** Range of tensile strength **27 1/2-54** Working pressure **by Rules 345kg Actual 350kg**



IS A DONKEY BOILER FITTED? *Yes*

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

Is the donkey boiler intended to be used for domestic purposes only? *Yes*

PLANS. Are approved plans forwarded herewith for Shafting *Referring to* Receivers *in London* Separate Tanks *Yes*
(If not, state date of approval) *Security, letter of 1.4.30. 1.5.30 - 2.4.30*

Donkey Boilers *Referring to* General Pumping Arrangements *in London* Oil Fuel Burning Arrangements *Yes*

SPARE GEAR.

Has the spare gear required by the Rules been supplied? *Yes please see list attached. Also for*

State the principal additional spare gear supplied:
Pumps driven by main engine: *Ballast pump 8' x 8' x 10"*
Main cooling water pumps: *200 gals. h. 8' x 8' x 10"*
Stern pumps: *8' x 8' x 10"*
Lubrication pumps: *200 gals. h. 8' x 8' x 10"*
H.P. fuel oil pump: *8' x 8' x 10"*
Motor piston cooling pump: *35 " " " 8' x 8' x 10"*
General Service pump 8' x 8' x 10"
Span water pump 6' x 4' x 10"
Ballast pump 8' x 8' x 10"
200 gals. h. 8' x 8' x 10"
4 - 8 " " " " " " " " " " " "
200 gals. h. 8' x 8' x 10"
Turning pump 8' x 4' 1/2' x 6"
200 gals. h. 8' x 8' x 10"
200 gals. h. 8' x 8' x 10"
1 Cylinder branch oil engine
Span piston cooling water pump

The foregoing is a correct description,
WERKSPOR N.V.

W. J. J. J.

Manufacturer.

Table with columns for Dates of Survey while building and Total No. of visits. Includes handwritten dates from 1930 to 1931.

Table with columns for Dates of Examination of principal parts: Cylinders, Covers, Pistons, Rods, Connecting rods, Crank shaft, Flywheel shaft, Thrust shaft, Intermediate shafts, Tube shaft, Screw shaft, Propeller, Stern tube, Engine seatings, Engines holding down bolts. Includes handwritten dates and materials like Steel.

Is the flash point of the oil to be used over 150° F. *Yes*
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with? *Yes*
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo? *oil tanks* If so, have the requirements of the Rules been complied with? *Yes*
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with? *No*

Is this machinery duplicate of a previous case? *Yes* If so, state name of vessel *M.V. Magdalena or*

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery has been made in accordance with Rules, Security's letter and approved plans. All material tested as required and workmanship good. The engines have been tested under full conditions and good.

Table with columns for Amount of Entry Fee, Special, Donkey Boiler Fee, Travelling Expenses (if any) and When applied for/When received. Includes handwritten amounts like £42, £1330, £201.60, £89.

F. A. J. J.
Engineer Surveyor to Lloyd's Register of

Committee's Minute

TUE. 8 DEC 1931

Assigned

+ L. Mc. 11.31 C.L.

oil eng. 2 D.B. 150lb.



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