

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY

No. 12240

Received at London Office 27 APR 1931

Port of AMSTERDAM

Date of writing Report 18 April 1931 When handed in at Local Office

Date, First Survey 4 October 1930 Last Survey 14 April 1931 Number of Visits 39

No. in Survey held at AMSTERDAM Reg. Book.

Gross 11500 Tons Net -

on the ~~XXXXX~~ ~~XXXXX~~ ~~XXXXX~~ Screw vessel
Built at Rotterdam

Machinefabriek & Scheepswerf van P.Smit Jr. Yard No. 469

van P.Smit Jr. When built 1931

By whom made N.V. Werkspoor

Engine No. - When made 1931

By whom made -

Boiler No. - When made -

Engines made at Amsterdam

Owners Anglo Saxon Petroleum Co. Ltd. Port belonging to London

Donkey Boilers made at -

Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted -

Brake Horse Power 2 X 2000

Nom. Horse Power as per Rule 714

Trade for which vessel is intended

OIL ENGINES, &c. Type of Engines *Werkspoor (Super charging) 2 of 4 stroke cycle* Single or double acting *Single*

Maximum pressure in cylinders *540 lb.* Diameter of cylinders *6.30 in.* Length of stroke *1100 mm.* No. of cylinders *6 + 2* No. of cranks *6*

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *840 mm.* Is there a bearing between each crank *Yes*

Revolutions per minute *130* Flywheel dia. *2260 mm.* Weight *6600 kg.* Means of ignition *Self ignition* Kind of fuel used *Deule oil*

Crank Shaft, dia. of journals *as per Rule 410 mm.* Crank pin dia. *410 mm.* Crank Webs *Mid. length breadth 440 mm. shrunk. Thickness parallel to axis 240 mm.*

Flywheel Shaft, diameter *as per Rule 410 mm.* Intermediate Shafts, diameter *as per Rule 410 mm.* Thrust Shaft, diameter at collars *as per Rule 500 mm.*

Tube Shaft, diameter *as per Rule 410 mm.* Screw Shaft, diameter *as per Rule 410 mm.* Is the tube screw shaft fitted with a continuous liner *Yes*

Bronze Liners, thickness in way of bushes *as per Rule 410 mm.* Thickness between bushes *as per Rule 410 mm.* 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 *Yes*

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 *Yes* Is an approved Oil Gland or other appliance fitted at the after end of the tube *Yes*

Propeller, dia. *410 mm.* Pitch *410 mm.* No. of blades *4* Material *Cast iron* whether Movable *Yes* Total Developed Surface *1.5 sq. feet*

Method of reversing Engines *Reverse motion* Is a governor or other arrangement fitted to prevent racing of the engine when de-clutched *Yes* Means of lubrication *Oil*

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

Cooling Water Pumps, No. *2* 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. *2* Diameter *150 mm.* Stroke *250 mm.* Can one be overhauled while the other is at work *Yes*

Pumps connected to the Main Bilge Line { No. and Size *2 bilge pumps 0.45 ton each* How driven *Electric*

Ballast Pumps, No. and size *2 bilge pumps 0.45 ton each* Lubricating Oil Pumps, including Spare Pump, No. and size *2 bilge pumps 0.45 ton each*

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*

In Holds, &c. *2* Are the Bilge Suctions in the Machinery Spaces *Yes*

Are all the Bilge Suction pipes in Holds and Trunnel Well fitted with strum-boxes *Yes* Are they fitted with Valves or Cocks *Yes*

Are all Sea Connections fitted direct on the skin of the ship *Yes* Are the Overboard Discharges above or below the deep water line *Yes*

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates *Yes* Are the Blow Off Cocks fitted with a spigot and brass covering plate *Yes*

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel *Yes* How are they protected *By covers*

What pipes pass through the bunkers *Water, oil, air* Have they been tested as per Rule *Yes*

What pipes pass through the deep tanks *Water, oil, air* 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*

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork *Yes* Is it fitted with a watertight door *Yes*

Main Air Compressors, No. *1* No. of stages *3* Diameters *510, 440, 12* Stroke *450 mm.* Driven by *Main engine*

Auxiliary Air Compressors, No. *1* No. of stages *3* Diameters *2 1/4, 1 1/2, 1 1/2* Stroke *12* Driven by *Hand*

Small Auxiliary Air Compressors, No. *1* No. of stages *3* Diameters *2 1/4, 1 1/2, 1 1/2* Stroke *12* Driven by *Hand*

Scavenging Air Pumps, No. *1* Diameter *110 mm.* Stroke *110 mm.* Driven by *Main engine*

Auxiliary Engines crank shafts, diameter *as per Rule 110 mm.* Sent Rot 28/3/31 from London

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *Yes* What means are provided for cleaning their inner surfaces *Hand*

Can the internal surfaces of the receivers be examined *Yes* Is there a drain arrangement fitted at the lowest part of each receiver *Yes*

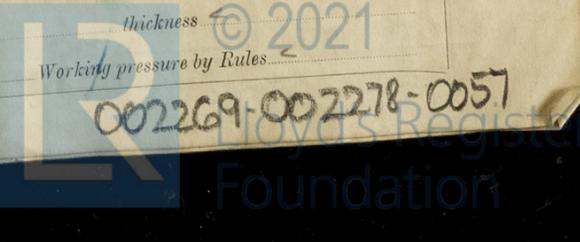
High Pressure Air Receivers, No. *2* Cubic capacity of each *400 L.* Internal diameter *450 mm.* thickness *11 mm.*

Seamless, lap welded or riveted longitudinal joint *Seamless* Material *Steel* Range of tensile strength *50/55 kg/cm²* Working pressure by Rules *14.15 kg/cm²*

Starting Air Receivers, No. *1* Total cubic capacity *400 L.* Internal diameter *450 mm.* thickness *11 mm.*

Seamless, lap welded or riveted longitudinal joint *Seamless* Material *Steel* Range of tensile strength *50/55 kg/cm²* Working pressure by Rules *14.15 kg/cm²*

002269-002278-0057



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting

Receivers *London* Separate Tanks *Office*

Donkey Boilers *Returned* General Pumping Arrangements *in London* Oil Fuel Burning Arrangements *Office*

SPARE GEAR *See text attached.*

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

Manufacturer.

Dates of Survey while building	During progress of work in shops--	4/10	24/10	25/10	30/10	4/11	14/11	20/11	25/11	1/12	2/12	6/12	8/12	15/12	16/12	20/12	30/12	14.30	31/12	31	10/1	14/1	19/1
	During erection on board vessel---	6/11	7/11	10/11	16/11	21/11	26/11	2/12	3/12	10/12	16/12	20/12	23/12	28/12	18/1	19/1	24/1	29/1	31/1	31	10/1	14/1	19/1
	Total No. of visits	39																					

Dates of Examination of principal parts—	Cylinders	4/10	6/11	Covers	4/10	6/11	Pistons	4/11	26/11	Rods	4/10	16/11	Connecting rods	4/10	16/11	
Crank shaft	25/11	26/11	Flywheel shaft	25/11	26/11	Thrust shaft	25/11	26/11	Intermediate shafts	25/11	26/11	Tube shaft	25/11	26/11		
Screw shaft	25/11	26/11	Propeller	25/11	26/11	Stern tube	25/11	26/11	Engine seatings	25/11	26/11	Engines holding down bolts	25/11	26/11		
Completion of fitting sea connections	25/11													Engines tried under working conditions	25/11	
Crank shaft, Material	Steel	Identification Mark	852582	Flywheel shaft, Material	Steel	Identification Mark	862282	Intermediate shafts, Material	Steel	Identification Mark	862382	Tube shaft, Material	Steel	Identification Mark	862482	
Thrust shaft, Material	Steel	Identification Mark	862582	Screw shaft, Material	Steel	Identification Mark	862682	Engines tried under working conditions	25/11							
Tube shaft, Material	Steel	Identification Mark	862782	Engines tried under working conditions	25/11											

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 If so, have the requirements of the Rules been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *Yes* If so, state name of vessel *—*

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 engines have been made in accordance with the Rules, Secretary's letter and approved plans. All material has been tested as required and workmanship good.

Copy of this Report forwarded to the Surveyor.

The engines have been forwarded to Protection to be fitted in main. P. 1st J. Ya. N° 469.

Certificate (if required) to be sent to Surveyor's Protectors

The amount of Entry Fee ... £ 42.-

Donkey Boiler Fee ... £ 10.-

Travelling Expenses (if any) ... £ 30.-

Committee's Minute

Assigned

The amount of Entry Fee ...	£ 42.-	When applied for,	19
Donkey Boiler Fee ...	£ 10.-	When received,	19
Travelling Expenses (if any) ...	£ 30.-		

TUE. 21 JUL 1931

See J. C. Rpt.

F. V. Beemster
Engineer Surveyor to Lloyd's Register of Shipping.



Dear Sir

I enclose

and guide

on the

Assess

for the

no. 469

The