

## REPORT ON OIL ENGINE MACHINERY.

No. 3378

Received at London Office

19 FEB 1931

Writing Report, 6th Feb. 1931. When handed in at Local Office

Port of Stockholm

Survey held at

Sickla

Date, First Survey 6th June, 1930

Last Survey 13th Feb. 1931

Number of Visits 6

Single  
on the Twin  
Triple  
Quadruple

Screw vessel

Tons

Gross

Net

at Hong Kong

By whom built Hong Kong &amp; Vancouver Trade Co

Yard No. 691

When built

es made at

Stockholm

By whom made Messrs. J.-B. Madsen Diesel

Engine No. 85/20

When made 1931

Boilers made at

By whom made

Boiler No.

When made

Horse Power 200

Owners Messrs. North Vegas Sugar Co., Inc.

Port belonging to

Haiti

Horse Power as per Rule 68

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

for which vessel is intended

ENGINES, &c.—Type of Engines Polar Diesel Oil Engine (Type M 43) 2 or 4 stroke cycle Single or double acting  
um pressure in cylinders 35 kg/cm<sup>2</sup> Diameter of cylinders 250 mm Length of stroke 420 mm No. of cylinders 4 No. of cranks 4  
f bearings, adjacent to the Crank, measured from inner edge to inner edge 368 mm Is there a bearing between each crank Yes  
tions per minute 300 Flywheel dia. 1150 mm Weight 1200 kg Means of ignition Compression Kind of fuel used Crude Oil  
Shaft, dia. of journals as per Rule 153 mm Crank pin dia. 160 mm Crank Webs Mid. length breadth 214 mm Thickness parallel to axis  
Flywheel is fitted as fitted 160 mm Intermediate Shafts, diameter as per Rule 362 Thrust Shaft, diameter at collars as per Rule  
Flywheel is fitted as fitted the after end of thrust shaft as fitted

Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner  
as fitted as fitted as fitted  
e 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 as fitted

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

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

liners are fitted, is the shaft lapped or protected between the liners

Is an approved Oil Gland or other appliance fitted at the after

the tube shaft Length of Bearing in Stern Bush next to and supporting propeller

ller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet

od of reversing Engines by compressed air Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication

Thickness of cylinder liners none fitted Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

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

g Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Pumps worked from the Main Engines, No. 1 Diameter 90 mm Stroke 100 mm Can one be overhauled while the other is at work

s connected to the Main Bilge Line { No. and Size  
How driven

t Pumps, No. and size

Lubricating Oil Pumps, including Spare Pump, No. and size

o independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

, No. and size:—In Machinery Spaces

ds, &c.

endent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

l the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

Are the Bilge Suctions in the Machinery Spaces

m easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

y fixed sufficiently high on the ship's side to be seen without lifting the platform plates

Are the Overboard Discharges above or below the deep water line

y each fitted with a Discharge Valve always accessible on the plating of the vessel

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

pipes pass through the bunkers

How are they protected

pipes pass through the deep tanks

Have they been tested as per Rule

l Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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

tment to another Is the Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

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

Air Compressors, No. 1

No. of stages 2

Diameters 175/20 mm

Stroke 150 mm

Driven by main engine

liary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

l Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

enging Air Pumps, No. 2

Diameter 390 mm

Stroke 180 mm

Driven by main engine

liary Engines crank shafts, diameter

as per Rule  
as fitted

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

ing, the internal surfaces of the receivers be examined Yes

What means are provided for cleaning their inner surfaces mudhole 250 mm

are a drain arrangement fitted at the lowest part of each receiver Yes

Pressure Air Receivers, No. 2 filled solid medium Cubic capacity of each

Internal diameter

thickness

ess, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

ing Air Receivers, No. 2

Total cubic capacity 800 litres

Internal diameter 500 mm

thickness 11.5 mm

ess, lap welded or riveted longitudinal joint lap welded

Material L.S. Steel

Range of tensile strength 38 kg/mm<sup>2</sup>

Working pressure by Rules 25.6 kg/cm<sup>2</sup>



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting. *E 22.4.26*

Receivers *6.5.27* Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

*to be supplied and inspected, when machinery is being fitted in ship*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } *6.12.23, 11/1230, 13, 9.8.13/1931*  
 { During erection on board vessel - - }  
 Total No. of visits *in shop 6*

Dates of Examination of principal parts—Cylinders *9.8.13/31* Covers *9.8.13/31* Pistons *13/31* Rods *✓* Connecting rods *6.28.30, 13/31*

Crank shaft *13.30, 13.8.13/31* Flywheel shaft Thrust shaft Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions *in shop 9.31*

Crank shaft, Material *S.M. Steel* Identification Mark *LLOYD'S No. 6034 KA. 13.2.31* Flywheel shaft, Material Identification Mark

Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F.

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *See Item Rpt No. 3273*

General Remarks (State quality of workmanship, opinions as to class, &c.)

*This engine has been constructed under Special Survey in accordance with Rule Requirements and approved Plans. Materials and workmanship are good, and the tests have proved satisfactory. It is submitted that this engine will be eligible to be classed with record of **LMC**, when fitted into a classed vessel to the satisfaction of the Society's Surveyors.*

Certificate (if required) to be sent to  
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee ... £ : : When applied for,  
 Special Survey fee *£Ks. 309.40* *14.2.1931*  
 Donkey Boiler Fee ... £ : : When received,  
 Travelling Expenses (if any) £ : : *17.3.1931*

Committee's Minute

TUE. 28 JUL 1931

Assigned

*See 7.6.31*

*R. J. Andersson*  
 Engineer Surveyor to Lloyd's Register of Shipping.



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