

REPORT ON OIL ENGINE MACHINERY.

No. 335446.

Received at London Office 30 MAY 1951

Date of writing Report 24/5/51 19.57 When handed in at Local Office 19 Port of Rotterdam

Survey held at Rotterdam Date, First Survey 7-3-49 Last Survey 14-3-1951

g. Book. 5576 on the Twin Triple Quadruple Screw vessel M.V. "San Lorenzo" Tons Gross 11673.73 Net 6526.12

uilt at Rotterdam By whom built P. Smit Jr. N.V. Yard No. 590 When built 1951

Engines made at Rotterdam By whom made P. Smit Jr. N.V. Engine No. 73/74 When made 1951

Monkey Boilers made at Rotterdam By whom made P. Smit Jr. N.V. Boiler No. 38/39 When made 1951

ake Horse Power 9300 = 2 engines Owners Yacimientos Petroliferos Fiscales Port belonging to Buenos Aires

N. Power as per Rule 1600 NHP = 1472 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ade for which vessel is intended Seagoing Service.

L. ENGINES, &c. — Type of Engines Heavy Oil, B. type 544 TF 160.2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 680 lbs. Diameter of cylinders 740 mm Length of stroke 1600 mm No. of cylinders 5 No. of cranks 5

Mean Indicated Pressure 93 lbs. Ahead Firing Order in Cylinders P. 1-5-2-3-4. S. 1-4-2-3-5 Span of bearings, adjacent to the crank, measured

from inner edge to inner edge 976 mm Is there a bearing between each crank Yes Revolutions per minute 115

Flywheel dia. 2430 Weight 11635 kg Moment of inertia of flywheel (lbs. in² or Kg. cm²) 40.00 kg/m² Means of ignition Compression Kind of fuel used Diesel oil

Crankshaft, Solid forged dia. of journals as per Rule App'd. Crank pin dia. 550 mm Crank webs Mid. length breadth 1020 mm Thickness parallel to axis 280 mm

Thrust Shaft, diameter at collars as fitted 370 mm Thrust Shaft, diameter at collars as per Rule App'd.

Screw Shaft, diameter as fitted 380 mm Screw Shaft, diameter as per Rule App'd.

Intermediate Shafts, diameter as fitted 370 mm Intermediate Shafts, diameter as per Rule App'd.

Thrust Shaft, diameter at collars as fitted 370 mm Thrust Shaft, diameter at collars as per Rule App'd.

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100652-010661-0017

AIR RECEIVERS:—Have they been made under survey. *Yes* State No. of report or certificate. *R. dam h=69*

Is each receiver, which can be isolated, fitted with a safety valve as per Rule. *Yes*

Can the internal surfaces of the receivers be examined and cleaned. *Yes* Is a drain fitted at the lowest part of each receiver. *Yes*

Injection Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —

Seamless, welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —

Starting Air Receivers, No. *2 main + 1 Qua* Total cubic capacity *40 m³ + 350 lb* Internal diameter *2.000 m* thickness *2.6 m*

Seamless, welded or riveted longitudinal joint *rimmed* Material *SM steel* Range of tensile strength *49/55 kg/mm²* Working pressure —

IS A DONKEY BOILER FITTED *2 donkey bls.* If so, is a report now forwarded. *Yes*

Is the donkey boiler intended to be used for domestic purposes only. *Cargo pumping/heating Bilge ballast pumping. Winchlass. Fire extinguishers.*

PLANS. Are approved plans forwarded herewith for shafting. *15-12-48 - 8-7-49* Receivers. *12-7-48* Separate fuel tanks. *2*

Donkey boilers. *30-9-48* General pumping arrangements. *10/48 - 29/3/49* Pumping arrangements in machinery space. *7-10-48*

Oil fuel burning arrangements. *29-3-49*

Have Torsional Vibration characteristics been approved. *Yes* Date of approval *E letter dated 16-12-48*

SPARE GEAR.

Has the spare gear required by the Rules been supplied. *Yes*

State the principal additional spare gear supplied. *Spare screw shaft.*

Description of fire extinguishing apparatus. *One foam generator capacity 4500 lbs/min with hoses & nozzles in engine room and donkey boiler space. One foam type extinguisher of 136 litres 4 C.O₂ snow extinguishers 2 gallons each. 2 Pyrene guns near switchboards. Steam smothering system in donkey boiler space.*

MACHINEFABRIEK & SCHEEPSWERF VAN

P. SMIT JR. N.V.

The foregoing is a correct description,

P. M. van Boven

Dates of Survey while building
During progress of work in shops - *1949: 8/3 - 20/4 - 24/4 - 3/6 - 8/6 - 5/7 - 23/7 - 28/8 - 1950: 3/1 - 4/1 - 14/1 - 24/1 - 31/1 - 7/2 - 15/2 - 22/2 - 1/3 - 4/3 - 29/4 - 25/4 - 26/4 - 5/5 - 1951: 24/5 - 24/5 - 5/6 - 9/6 - 9/6 - 16/6 - 21/6 - 23/6 - 23/6 - 4/7 - 13/7 - 24/7 - 24/7 - 10/8 - 11/8 - 23/8 - 19/9 - 23/9 - 10/10 - 11/10 - 14/10 - 26/10 - 29/11 - 1951: 24/1 - 2/2 - 2/2 - 22/2 - 24/2 - 2/3 - 6-7-8/3 - 12/3 - 14/2.*
During erection on board vessel - *1950: 11/8 - 17/8 - 23/8 - 4/9 - 11/9 - 14/9 - 24/9 - 25/9 - 24/10 - 2/11 - 4/12 - 21/12 - 1951: 26/1 - 2/2 - 2/2 - 22/2 - 24/2 - 2/3 - 6-7-8/3 - 12/3 - 14/2.*
Total No. of visits. *21.*

Dates of examination of principal parts—Cylinders *16-10-50* Covers *26-10-50* Pistons *10-10-50* Rods *10-10-50* Connecting rods *6-5-50*

Crank shaft *2-6-50* Flywheel shaft *2-6-50* Thrust shaft *2-6-50* Intermediate shafts *24-5-50* Tube shaft *24-5-50*

Screw shaft *5-5-50* Propeller *2-10-50* Stern tube *20-4-50* Engine seatings *2-11-50* Engine holding down bolts *26-1-51*

Completion of fitting sea connections. *11-9-50* Completion of pumping arrangements. *27-2-51* Engines tried under working conditions *6-4-51*

Crank shaft, material *S.M. steel* Identification mark *LLOYD'S No 534 PFW 2-6-50* Flywheel shaft, material, — Identification mark —

Thrust shaft, material *S.M. steel* Identification mark *LLOYD'S No 535 PFW 2-6-50* Intermediate shafts, material *S.M. steel* Identification marks *LLOYD'S No 206 PFW 24-5-50*

Tube shaft, material — Identification mark — Screw shaft, material *S.M. steel* Identification mark *LLOYD'S No 207 PFW 24-5-50*

Identification marks on air receivers. *No 361 - 362 LLOYD'S TEST 40 kg/cm² WP 25 kg/cm² EMD 4-7-50* Spare shaft: *LLOYD'S No 2183 L.M./PFW 21-7-50*

Welded receivers, state Makers' Name. —

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*

Description of fire extinguishing apparatus fitted. *Please see above.*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo. *Tanker* If so, have the requirements of the Rules been complied with. —

If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with. *not desired*

Is this machinery duplicate of a previous case. *Yes* If so, state name of vessel. *M.V. "Director Madariaga" - La S.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery has been constructed under*

Special Survey in accordance with the Society's Rules, approved plans and Secreta

letters, of materials tested as required and has been satisfactorily fitted in the vessel

The workmanship is throughout good. A notice board has been fitted at the centre

station stating that the engines are not to be operated continuously between 51

62 RPM and the engine tachometers marked accordingly. The machinery has been

tried under full working condition and found in good working and manoeuvring

order and is in my opinion eligible to be classed in the Society's Register for

with + LMC - 3.51 - Oil Engines - C.L.

The amount of Entry Fee ... *fl 5610.-*

Special *weldings* *fl 755.-* When applied for *20/2 19 57*

Donkey Boiler Fee... *£* : : When received *14/3 19 57*

Travelling Expenses (if any) *fl 104.-*

Committee's Minute

Assigned *+ LMC 3.51 Oil Eng. (with endorsement)*

2 NTDB 18016 C.L.

2 DB 18016

FRI. 15 JUN 1951

2 m. Woodcock

Engine Surveyor to Lloyd's Register of Shipping

Lloyd's Register Foundation

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