

REPORT ON OIL ENGINE MACHINERY.

No. 6300

Received at London Office

Date of writing Report *Sept 26th 1927* When handed in at Local Office *Sept 26th 1927*Port of *Manchester*No. in Survey held at *Manchester*Date, First Survey *August 12th 1927*Last Survey *Sept 23rd 1927*Number of Visits *6*

Reg. Book.

Single
on the *Triple*
Screw *Quadruple**Barge. Owned by Messrs The Anglo Mexican Petroleum Co. Ltd stationed at Tampico, Mexico.*Tons { Gross
Net

Built at

By whom built

Yard No.

When built

Engines made at *Manchester*By whom made *Messrs L. Gardner & Sons Ltd*Engine No. *21416*When made *1927*Boilers made at *1*

By whom made

Boiler No.

When made

Horse Power *140*Owners *Messrs The Anglo Mexican Pet. Co. Ltd.*

Port belonging to

Horse Power as per Rule *40* ✓

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Use for which vessel is intended

ENGINES, &c. Type of Engines *Vertical, Semi-Diesel, Air Starting, Reversible* ✓ 2 or 4 stroke cycle *2* ✓ Single or double acting *Single* ✓Maximum pressure in cylinders *300* ✓ Diameter of cylinders *11 1/2"* ✓ Length of stroke *12 1/2"* ✓ No. of cylinders *4* ✓ No. of cranks *4* ✓No. of bearings, adjacent to the Crank, measured from inner edge to inner edge *17 1/4"* ✓ Is there a bearing between each crank *Yes* ✓Revolutions per minute *320* ✓ Flywheel dia. *38 3/8"* ✓ Weight *1767 lbs* ✓ Means of ignition *Hot bulb* ✓ Kind of fuel used *Heavy oil* ✓Crank Shaft, dia. of journals *as per Rule 4.97"* ✓ Crank pin dia. *5 1/2"* ✓ Crank Webs Mid. length breadth *6 3/4"* ✓ Thickness parallel to axis ✓Intermediate Shafts, diameter *as per Rule 5 1/8"* ✓ Thrust Shaft, diameter at collars *as per Rule 3.6"* ✓Wheel Shaft, diameter *as fitted* ✓ Intermediate Shafts, diameter *as fitted* ✓ Thrust Shaft, diameter at collars *as fitted 3.74"* ✓Main Shaft, diameter *as per Rule* ✓ Is the *1* shaft fitted with a continuous liner {Intermediate Shafts, diameter *as fitted* ✓ Is the *1* shaft fitted with a continuous liner {Screw Shaft, diameter *as per Rule* ✓ Is the *1* shaft fitted with a continuous liner {Intermediate Shafts, diameter *as fitted* ✓ Is the *1* shaft fitted with a continuous liner {Screw Shaft, diameter *as per Rule* ✓ Is the *1* shaft fitted with a continuous liner {Intermediate Shafts, diameter *as fitted* ✓ Is the *1* shaft fitted with a continuous liner {Screw Shaft, diameter *as per Rule* ✓ Is the *1* shaft fitted with a continuous liner {Intermediate Shafts, diameter *as fitted* ✓ Is the *1* shaft fitted with a continuous liner {Screw Shaft, diameter *as per Rule* ✓ Is the *1* shaft fitted with a continuous liner {Intermediate Shafts, diameter *as fitted* ✓ Is the *1* shaft fitted with a continuous liner {Screw Shaft, diameter *as per Rule* ✓ Is the *1* shaft fitted with a continuous liner {Intermediate Shafts, diameter *as fitted* ✓ Is the *1* shaft fitted with a 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IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting Crank and Thrust Receivers Yes Separate Tanks No

Donkey Boilers. General Pumping Arrangements Oil Fuel Burning Arrangements

SPARE GEAR

The foregoing is a correct description.

WILLIAM GARDNER, Manufacturer.

Dates of Survey while building
During progress of work in shops --
During erection on board vessel --
Total No. of visits

1927 August 12. 16. 23. Sept. 8. 20. 23.

Dates of Examination of principal parts—Cylinders 16-8-27 Covers 23-8-27 Pistons 8-9-27 Rods Connecting rods 16-8-27

Crank shaft 16-8-27 Flywheel shaft Thrust shaft 6-9-27 Intermediate shafts Tube shaft

Screw shaft Propeller 23-9-27 Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions

Crank shaft, Material Mild Steel Identification Mark 52 Flywheel shaft, Material Identification Mark

Thrust shaft, Material Mild Steel Identification Mark 1239 A 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.

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with

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

Is this machinery duplicate of a previous case Yes If so, state name of vessel J. Pollock & Co. 1087. Incl. Rept. 5312

General Remarks (State quality of workmanship, opinions as to class, &c.) The above main engine of Gardner's 4 T 8 Type,

has been built under special survey and the materials tested in accordance with the Rules of this Society. The materials so far as can be seen are sound and the workmanship is good. A test bed trial proved satisfactory and the engine manoeuvred well.

The above engine is in our opinion eligible for the notation of + L.M.C. with date when fitted on board the vessel in accordance with the Rules of this Society.

Amount charged to Messrs L. Gardner & Sons Ltd £17-0-0 = £13-12-0.

The amount of Entry Fee ... £ 2 : 0 :

Special ... £ 15 : 0 :

Donkey Boiler Fee ... £ 13 : 12 : 0

Travelling Expenses (if any) ... £ 1 : 0 :

Committee's Minute

Assigned

When applied for,

30 Sept 1927

When received,

28.10.27

23 MAR 1928

1 FEB 1929

Approved by C.G. Butterworth
Surveyor to Lloyd's Register of Shipping.

Rpt. 9a.

Port of

MANCHESTER

Continuation of Report No.

dated

on the

L. Gardner & Sons, Ltd.

4T8 Engine for Anglo-Mexican Petroleum Co. Ltd.

Plans enclosed:-

General Arrgt.

Clutch.

Crankshaft.

Thrust Shaft.

Flywheel.

Connecting Rod.

Air Bottles.