

REPORT ON OIL ENGINE MACHINERY.

No. 19263.

16 DEC 1950

Received at London Office

Date of writing Report **4th Dec. 50.** When handed in at Local Office **13th Dec. 50.** Port of **MIDDLESBROUGH.**
 No. to Survey held at **Middlesbrough.** Date, First Survey **30th May. 1950.** Last Survey **30th Nov. 1950.**
 Reg. Book. Number of Visits **54.**
 Single ~~XXXX~~ Screw vessel **m.v. "LIMATULA".** Tons Gross **6476.44**
 Net **3590.60**
 Built at **South Bank.** By whom built **Smith's Dock Co. Ltd.,** Yard No. **1188** When built **1950.**
 Engines made at **Newcastle on Tyne.** By whom made **R & W Hawthorne Leslie & Co. Ltd.** Engine No. **4061.** When made **1950**
 Donkey Engines made at **Wallsend on Tyne.** By whom made **The North Eastern Marine Eng. Co. (1938) Ltd.** Boiler No. **3192.** When made **1950**
 Brake Horse Power **Designed Max. 2700.** Owners **The Angle Saxon Petroleum Co. Ltd.,** Port belonging to **London.**
 Nom. Horse Power as per Rule **= 376** **566. = MN** Is Refrigerating Machinery fitted for cargo purposes **No.** Is Electric Light fitted **Yes.**
 Trade for which vessel is intended **Open Sea Services.**

OIL ENGINES &c. — Type of Engines **For 4 stroke cycle.** Single or double acting **Single or double acting**
 Maximum pressure in cylinders **Mean Indicated Pressure** Diameter of cylinders **Length of stroke** No. of cylinders **No. of cranks**
 span of bearings, adjacent to the crank, measured from inner edge to inner edge **Is there a bearing between each crank**
 revolutions per minute **Flywheel dia.** Weight **Means of ignition** Kind of fuel used **Kind of fuel used**
 Crank **Solid forged** dia. of journals **as per Rule** Crank pin dia. **as fitted** Crank webs **Mid length breadth** Thickness parallel to axis **shrunk** Thickness around eye **as fitted**
 Flywheel shaft, diameter **as per Rule** Intermediate shafts, diameter **as per Rule** Thrust shaft, diameter at collars **as fitted**
 Tube shaft, diameter **as per Rule** Screw shaft, diameter **as fitted** Is the **tube** shaft fitted with a continuous liner **Is the**
 Bronze liners, thickness in way of bushes **as per Rule** Thickness between bushes **as fitted** Is the after end of the liner made watertight in the
 propeller boss **If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner**
 If the liner does not fit tightly at the part between the bushes in the stern tube, is the space charged with a plastic material insoluble in water and non-
 irritating **If two liners are fitted, is the shaft lapped or protected between the liners** Is an approved Oil Gland or other appliance fitted at the after
 end of tube shaft **If so, state type** Length of bearing in Stern Bush next to and supporting propeller **Is an approved Oil Gland or other appliance fitted at the after**
 Propeller, dia. **Pitch** No. of blades **Material** whether moveable **Total developed surface** sq. feet **Is an approved Oil Gland or other appliance fitted at the after**
 Method of reversing Engines **Is a governor or other arrangement fitted to prevent racing of the engine when declutched** Means of
 lubrication **Thickness of cylinder liners** Are the cylinders fitted with safety valves **Are the exhaust pipes and silencers water cooled**
 or lagged with non-conducting material **If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned**
 back to the engine **Cooling Water Pumps, No. 2** **(1 - M.E. Driven (F.W. 124. x 124) (Sw 2 1/2")** **(1 - 10" x 10 1/2" x 10")** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **Fresh**
 Bilge Pumps worked from the Main Engines, No. **One.** Diameter **Rotary Stroke 28 tns/Hr.** in one be overhauled while the other is at work **Water**
 Pumps connected to the Main Bilge Line **No. and size** **1 - G.S. Pump 12" x 8 1/2" x 12" 1 - Bilge Pump 6" x 6" x 6"**
 How driven **steam.** **41 ME pump**
 Is the cooling water led to the bilges **No.** If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
 arrangements **1 - Main Engine Driven**
 Ballast Pumps, No. and size **None.** Power Driven Lubricating Oil Pumps, including spare pump, No. and size **1 - 12" x 10 1/2" x 24"**
 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: **3' - 3" bilge suction, 1 - 2 1/2" & 1 - 4" cofferdam.** No. **1 2 - 4"**
 in holds, &c. **1 - 4" Fore Peak, 1 - 3" Aft Peak 2 - 2 1/2" Fore Hold, 2 - 2" Chain Locker & Store Flat.** No. **3 1 - 2"**
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size **1 - 5" & 1 - 4"** **1 - 4" Cofferdam.**
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes **Yes** Are the bilge suction pipes in the machinery spaces led from easily
 accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges **Yes.**
 Are all Sea Connections fitted direct on the skin of the Ship **Yes** Are they fitted with valves or cocks **Both.** Are they fixed
 efficiently high on the ship's side to be seen without lifting the platform plates **Yes** Are the overboard discharges above or below the deep water line **Below.**
 Are they each fitted with a discharge valve always accessible on the plating of the vessel **Yes** Are the blow off cocks fitted with a spigot and brass covering plate **Yes**
 That pipes pass through the bunkers **None** How are they protected **None.**
 That pipes pass through the deep tanks **None.** Have they been tested as per Rule **-**
 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 **-** Is it fitted with a watertight door **-** worked from **-**
 Is a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork **-**
 Main Air Compressors, No. **None** No. of stages **-** diameters **-** stroke **-** driven by **-**
 Auxiliary Air Compressors, No. **One** No. of stages **Two** diameters **4 1/2" - 9 1/4"** stroke **7 1/2"** driven by **steam (Howdens)**
 Small Auxiliary Air Compressors, No. **One** No. of stages **Two** diameters **3 1/2" - 8"** stroke **6"** driven by **diesel (Ruston & Hornsby).**
 What provision is made for first charging the air receivers **1 - Steam Driven Compressor & 1 - Diesel Driven Compressor.**
 scavenging Air Pumps, No. **None** diameter **-** stroke **-** driven by **-**
 Auxiliary Engines crank shafts, diameter **as per Rule** Journals **4.3/16"** Crankpins **5 1/4"** No. **303791** Position **Eng. Room Star Main Platform.**
 Have the auxiliary engines been constructed under special survey **Yes** Is a report sent herewith **Yes**

AIR RECEIVERS:—Have they been made under survey.....State No. of report or certificate.....

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

Can the internal surfaces of the receivers be examined and cleaned.....

Is a drain fitted at the lowest part of each receiver.....

Injection Air Receivers, No.....

Cubic capacity of each.....

Internal diameter.....

thickness.....

Seamless, lap welded or riveted longitudinal joint.....

Range of tensile strength.....

Working pressure.....

Starting Air Receivers, No.....

Total cubic capacity.....

Internal diameter.....

thickness.....

Seamless, lap welded or riveted longitudinal joint.....

Material.....

Range of tensile strength.....

Working pressure.....

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.....

No.....

PLANS. Are approved plans forwarded herewith for shafting.....

Yes.....

Receivers.....

No.....

Separate fuel tanks.....

No.....

Donkey boilers.....

No.....

General pumping arrangements.....

Yes.....

Pumping arrangements in machinery space.....

Yes.....

Oil fuel burning arrangements.....

SPARE GEAR.....

Yes.....

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

State the principal additional spare gear supplied.....

Tail End Shaft & Propeller.....

Identification Marks of Spare Tail End Shaft:- 4061 Spare.....

Lloyd's No. 17825.....

14044.....

H.A.I. 3.9.48.....

A.B. 5.4.50.....

The foregoing is a correct description.....

FOR SMITH'S LOCK.....

Manufacturer.....

1950: May 30, June 12, 15, 28, July 5, 6, 7, 10, 11, Aug. 21, 28, Sept. 8, 11, 13, 14, 18, 20, 21, 24, 29, Oct. 2, 4, 5, 10, 11, 12, 13, 15, 17, 18, 19, 20, 23, 24, 28, 29, 31, Nov. 1, 3, 6, 7, 8, 9, 10, 13, 14, 15, 16, 17, 21, 24, 28, 29, 30,

Dates of Survey while building

During progress of work in shops -

During erection on board vessel -

Total No. of visits.....

54.....

Dates of examination of principal parts: Cylinders..... Covers..... Pistons..... Rods..... Connecting rods.....

Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts..... 2.10.50..... Tube shaft.....

Screw shaft..... 7.7.50..... Propeller..... 7.7.50..... Stern tube..... 6.7.50..... Engine seatings..... 2.10.50..... Engine holding down bolts..... 2.10.50.....

Completion of fitting sea connections..... 15.6.50..... Completion of pumping arrangements..... 24.11.50..... Engines tried under working conditions..... 16.11.50..... 29.11.....

Crank shaft, material..... Identification mark..... 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.....

Identification marks on air receivers..... See Newcastle Report No. 10764.....

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..... Steam Smothering.....

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.....

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..... No..... If so, state name of vessel.....

General Remarks (State quality of workmanship, opinions as to class, &c..... These engines and boilers have been fitted aboard this vessel in accordance with the approved plans and Rule requirements, and on completion the machinery was tried under working condition and found satisfactory, In our opinion this vessel is now eligible for a record of LMC 11,50 and notation of TS(CL) 11,50

Installation

The amount of Entry Fee 1/3 ... £ 62 : 15 0

Special £ : :

Donkey Boiler Fee... .. £ : :

Travelling Expenses (if any) £ - : :

When applied for 14.12. 1950.

When received 19.....

(Committee's Minute.....

12 JAN 1951

Assigned.....

+ LMC 11.50 Oil Eng. C.L. DB 1806

