

# REPORT ON OIL ENGINE MACHINERY

No. 3291

DEC 22 1937

Writing Report 30<sup>th</sup> Nov 37, When handed in at Local Office 30<sup>th</sup> Nov 37, Port of GALVESTON  
 Survey held at Beaumont, Texas. Date, First Survey 24/9/37. Last Survey 6/10 1937.  
 Number of Visits 5

on the Single Screw vessel "EL. CARIBE."  
 at Bath, Me. By whom built Lescas P.S. Co. Yard No. When built 1917.  
 was made at Beloit, Wis. By whom made Fairbanks, Morse. Engine No. 591513 When made 1924.  
 Boilers made at none By whom made Boiler No. When made  
 Horse Power 200. Owners Lescas Company. Port belonging to Wilmington, Del.  
 Horse Power as per Rule 138 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.  
 for which vessel is intended Service in the Gulf of Mexico & Caribbean Sea.

ENGINES, &c. Type of Engines Semi Diesel 2 S.C.S.A. 2 or 4 stroke cycles 2 Single or double acting Single.  
 Mean pressure in cylinders 350 lbs Diameter of cylinders 14" Length of stroke 18" No. of cylinders 4 No. of cranks 4  
 bearings, adjacent to the Crank, measured from inner edge to inner edge 16 1/2" Is there a bearing between each crank Yes.  
 revolutions per minute 250 Flywheel dia. 36" Roll 15. rim 12" x 3" 2 webs 2" spark plug Kind of fuel used Diesel Oil.  
 Shaft, dia. of journals as per Rule 4" Crank pin dia. 4" Crank Webs Mid. length breadth 1 1/4" Thickness parallel to axis Solid.  
 as fitted 4" Mid. length thickness 4" shrunk Thickness around eye-hole Forged.  
 Propeller Shaft, diameter as per Rule 7 3/4" Intermediate Shafts, diameter as per Rule 5 3/16" Thrust Shaft, diameter at collars as per Rule 7 3/4" Roller Shaft Bearing.  
 as fitted 7 3/4" as fitted 5 3/16" as fitted 7 3/4" as fitted 7 3/4"  
 Shaft, diameter as per Rule 5 3/16" Is the shaft fitted with a continuous liner Yes.  
 as fitted 5 3/16" Is the shaft fitted with a continuous liner Yes.

Liners, thickness in way of bushes as per Rule 11/32" Thickness between bushes as per rule 7/32" Is the after end of the liner made watertight in the boss Yes.  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length.  
 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 end of the tube.  
 No. If so, state type. Length of Bearing in Stern Bush next to and supporting propeller 27".  
 Propeller, dia. Pitch No. of blades 3 Material Bronze whether Movable Solid Total Developed Surface sq. feet  
 of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes. Means of lubrication  
 maker Standard Are the cylinders fitted with safety valves Yes. Are the exhaust pipes and silencers water cooled & plugged with  
 Thickness of cylinder liners Solid. Are the exhaust pipes and silencers water cooled & plugged with Exhausting to  
 acting material Yes. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Funnel.

Water Pumps, No. one direct S.A. Plunger pump Is the suction provided with an efficient strainer which can be cleared within the vessel Yes.  
 one aux Centrifugal pump  
 special arrangements are made for dealing with cooling water if discharged into bilges Overboard  
 Pumps worked from the Main Engines, None. The cooling water pumps (plunger type) driven off main engine. Can one be overhauled while the other is at work Bilge Line.  
 Bilge connected to the Main Bilge Line No. and size One - Rotary pump, RPM 1150, 2" dia. 2" Desel. Eleet motor 5 HP, 115V, 38.5 AMP. Yes.  
 How driven One - Fairbanks Morse Centrifugal pump, RPM 1750, Eleet motor 1 HP, 115V, 1 Amp. Pumping.  
 Pumps, No. and size as above. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size Two (2) Right Hand truck  
 independent means arranged for circulating water through the Oil Cooler none. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
 No. and size: - In Machinery Spaces Two - 2" direct suet in Eng room. In Pump Room One - 2" suet.  
 Double Acting Hand pump Challenger type

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size At above - (2) two - 2".  
 Are the Bilge Suction pipes in Hold and Turret Well fitted with strum-boxes Yes.  
 Are the Bilge Suctions in the Machinery Spaces easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes.  
 Are they fitted with Valves or Cocks Yes.  
 Are the Overboard Discharges above or below the deep water line near deep water line  
 Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes.

How are they protected none.  
 Have they been tested as per Rule none.  
 Are they fitted with a watertight door Is it fitted with a watertight door worked from  
 Is the Shaft Tunnel watertight none Is it fitted with a watertight door worked from  
 Is a drain fitted at the lowest part of each receiver Yes.  
 Compressors, No. One. No. of stages One Diameters 5 3/8" Stroke 4" Driven by Eccentric on Crank Shaft.  
 Air Compressors, No. One. No. of stages Two Diameters 1 3/4, 5 3/4" Stroke 3 1/4" Driven by Eleet motor 6.5 HP.  
 125V, 4.5 1/2 amp.  
 Auxiliary Air Compressors, No. one. No. of stages one Diameters 2 7/8" Stroke 1 3/4" Driven by Cargo pump, 30 HP.  
 Diesel, 6 cpl.

Receiving Air Pumps, No. one. Diameter 1 5/8" diam. Wenton Wellinghouse. 7.5 HP. Rev. 1200. 6 cyl. 3" x 4". 120V, 6.25 amp. Cor. Pumped.  
 Engines crank shafts, diameter 2" diam. Buda Diesel 4 S.C.S.A. 4 cyl. 3 5/8" diam x 4 1/2". Rev. 1200. KW 10, V 125, Amps 80.  
 RECEIVERS: - Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes.  
 Are the internal surfaces of the receivers examined and cleaned and cleaned Is a drain fitted at the lowest part of each receiver Yes.  
 Pressure Air Receivers, No. One. Cubic capacity of each 18.8 cub ft. Internal diameter 14 1/2" thickness 1/2" 5/8"  
 Material Steel Range of tensile strength 60,000 lbs. Working pressure Actual 750 lbs (makers) (stamps)  
 Air Receivers, No. Three (3). Total cubic capacity 22.5. Internal diameter 2 - 20" dia. thickness 7/8"  
 Material Steel Range of tensile strength 60,000. Working pressure Actual 200 lbs.

That all receivers were removed, examined & tested by U.S. local  
 at Beaumont, Texas. April 1936.  
 Lloyd's Register Foundation

IS A DONKEY BOILER FITTED? No

If so, is a report now forwarded?

Is the donkey boiler intended to be used for domestic purposes only?

PLANS. Are approved plans forwarded herewith for Shafting No  
(If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied? Yes, and in excess of.

State the principal additional spare gear supplied

Spare screw shaft, one crank pin bearing complete.  
main engine roller thrust-bearing, 6 fuel valves, 1 Conn  
Circulating pump Saleng.  
motor for Linton Airc Generator  
Also a lathe on board & ample material

The foregoing is a correct description,

Manufacturer.

Dates of Survey During progress of work in shops - -  
while building During erection on board vessel - - -  
Total No. of visits 5

24/9/, 28/9/, 1/10, 5/10, 6/10/ 1934.

Dates of Examination of principal parts—Cylinders

Covers

Pistons

Rods

Connecting rods

Crank shaft

Flywheel shaft

Thrust shaft

Intermediate shafts

Tube shaft

Screw shaft

1/10/34.

Propeller

1/10/34.

Stern tube

Engine seatings

Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements

Engines tried under working conditions 6/10/34

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

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.

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

Is this machinery duplicate of a previous case  If so, state name of vessel \_\_\_\_\_

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

The whole of the machinery has been opened up, examined & tested under working conditions, and found to be a good and safe working condition, and in general conformity with the Rules. (See Committee Rpt of 1934)  
In my opinion the vessel is eligible to have Rec of LMC 10.34, with notation of Screw Shaft (CL) seen N.E. 24.

The Surveyors are requested not to write on or below the space for Committee's Minute.

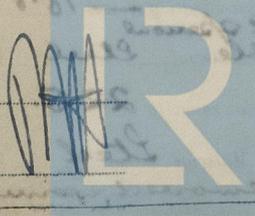
The amount of Entry Fee .. £ : : When applied for.  
Special ... £ 50.00 : : 5/11 1934 WR  
Donkey Boiler Fee ... £ : :  
Travelling Expenses (if any) £ : : 11/11 1934

Wm Rennie  
Engineer Surveyor to Lloyd's Register of Shipping

NEW YORK DEC 8 1937

Committee's Minute

Assigned N.E. 24 Oil Eng.



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