

REPORT ON OIL ENGINE MACHINERY.

No. 526

of writing Report May 9 1930 When handed in at Local Office

Port of Cleveland, Ohio

28 JUL 1930

in Survey held at Cleveland, Ohio

Date, First Survey Feb. 14th

Last Survey April 23 1930

Number of Visits 20

on the ^{Single} ~~Triple~~ ~~Quadruple~~ Screw vessel "LTC No 3"

Tons ^{Gross} 548
^{Net} 321

at Fore River, Mass.

By whom built Bethlehem S. B. Co.

Yard No. 1442 When built 1930

ines made at Cleveland

By whom made Winton Engine Company

Engine No. 3801 When made 1930

key Boilers made at

By whom made

Boiler No. When made

ke Horse Power 325 (each)

Owners LAKE TANKERS CORP.

Port belonging to WILMINGTON DEL.

re Horse Power as per Rule 142

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted YES

de for which vessel is intended INLAND WATERS.

ENGINES, &c.—Type of Engines Winton Diesel-Port & Starboard 2 or 4 stroke cycle 4 Single or double acting S.

imum pressure in cylinders 675 lbs. Diameter of cylinders 11" Length of stroke 15" No. of cylinders 6 No. of cranks 6

of bearings, adjacent to the Crank, measured from inner edge to inner edge 13 1/2" Is there a bearing between each crank Yes

tations per minute 375 Flywheel dia. 60" Weight 5360 lbs. Means of ignition Solid inj. Kind of fuel used Diesel oil

Shaft, dia. of journals as per Rule 6.32" Crank pin dia. 7" Crank Webs Mid. length breadth 9 3/8" Mid. length thickness 3 7/8" Thickness parallel to axis

Wheel Shaft, diameter as per Rule 6.32" Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule

Shaft, diameter as fitted 7" Screw Shaft, diameter as fitted Is the tube shaft fitted with a continuous liner

ize 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

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

e 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

ve 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

If so, state type Length of Bearing in Stern Bush next to and supporting propeller

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

hod of reversing Engines Elect. drive Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication

orced Thickness of cylinder liners 2" Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water coated or lagged with

conducting 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

ing Water Pumps, No. 106 G.P.M. Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

o Pumps worked from the Main Engines, No. 2 cyl. D. A. type Diameter Stroke Can one be overhauled while the other is at work

ps connected to the Main Bilge Line No. and Size ONE 2 1/2" ROTARY ONE 3" ROTARY How driven ELECTRIC MOTOR

ast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size 26.5 G.P.M. 2 cyl. S.A. type

two independent means arranged for circulating water through the Oil Cooler YES Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

ps, No. and size: In Machinery Spaces 3 - 2 1/2" DIAM. In Pump Room TWO 2 1/2" diam

olds, &c. (Tanker) Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ONE 2 1/2"

all the Bilge Suction pipes in Holds and Tunnel Wall fitted with stream-boxes YES Are the Bilge Suctions in the Machinery Spaces

rom easily accessible mud-boxes, placed above the level of the working floor, with straight fast pipes to the bilges YES

all Sea Connections fitted direct on the skin of the ship YES Are they fitted with Valves or Cocks VALVES

they fixed sufficiently 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 YES

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

t pipes pass through the bunkers YES How are they protected

t pipes pass through the deep tanks YES Have they been tested as per Rule

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

e 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

partment to another YES Is the Shaft Tunnel watertight NONE Is it fitted with a watertight door worked from

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

n Air Compressors, No. 1 No. of stages 2 Diameters 3 1/4-4 Stroke 4" Driven by MOTOR

iliary Air Compressors, No. 1 No. of stages 2 Diameters 2 1/2-3 1/4 Stroke 3" Driven by GASOLINE ENG

all Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

venting Air Pumps, No. Diameter Stroke Driven by

iliary Engines crank shafts, diameter as per Rule SEE ATTACHED REPORT.

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

the internal surfaces of the receivers be examined and cleaned YES Is a drain fitted at the lowest part of each receiver YES

h Pressure Air Receivers, No. Cubic capacity of each Internal diameter Thickness

lass, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rule

rting Air Receivers, No. Four Total cubic capacity 36 cub. ft. Internal diameter 16" Thickness 3/8"

lass, lap welded or riveted longitudinal joint L. D.R. Material Steel Range of tensile strength 55000 lbs. Working pressure by Rule

& copper brazed. minimum 400 lbs.

009004-009057-0085

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

pt. 4c.

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

PLANS. Are approved plans forwarded herewith for Shafting Yes

Receivers

No

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied

The foregoing is a correct description.

Winton Engine Co. - J. H. Hutton Manufacturer.

1930
Dates of Survey while building
During progress of work in shops -- Feb. 14, 24, 25, 26, 27, 28, March 5, 11, 13, 24, 26, 31, April, 2, 3, 7, 10
During erection on board vessel -- 14, 15, 16, 23, MAR 3, AP 24, MAY 20, 23, 28, JUNE 3, 5, 9, 10, 12, 16, 21, 24, 30, 1930
Total No. of visits 20 & 14

Dates of Examination of principal parts—Cylinders Feb. 14 - Mar. 26 Covers Feb. 14 - Mar. 26 Pistons Feb. 14 - Mar. 26 Rods - Connecting rods Feb. 14 - Mar. 26

Crank shaft Mar. 13-26 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 Lloyd's 2103-2112 Engines tried under working conditions

Crank shaft, Material O.H. Steel Identification Mark 12-12-29 Flywheel shaft, Material Identification Mark

Thrust shaft, Material Identification Mark G.D. 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

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 YES If so, state name of vessel "LTC No 1" "LTC No 2"

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

The above mentioned engines (Port & Starboard) have been built under Special Survey, and on completion were tested under full and intermediate loads in the Shop. The materials and workmanship were found to be sound and efficient. When the engines have been fitted on board the vessel and tried out, to the satisfaction of the Society's surveyors, she will, in my opinion, be eligible for record L.M.C. (with date) in the Register Book. (The engines are intended to be used in connection with the electric system of propulsion.)

Enclosed herewith is copy of crank shaft drawing, forging reports Nos. 2103 and 2112, also copies of certificates for air receivers Nos. 480, 481, 488, 489.

THE ABOVE MENTIONED ENGINES HAVE BEEN FITTED ON BOARD, EXAMINED UNDER WORKING CONDITIONS AND FOUND SATISFACTORY. QUALITY OF WORKMANSHIP AND MATERIALS IS GOOD AND IN THE OPINION OF THE UNDERSIGNED ELIGIBLE TO HAVE THE RECORD OF L.M.C. 6-3

WITH THE NOTATION "2 OIL ENGINES CONNECTED TO ELECTRIC MOTOR & SC. SHAFT."

Fee charged as per agreement with Winton Engine Co., Request No. 194.

The amount of Entry Fee	£	:	:	When applied for,	19.
Special	£	:	:	When received,	13. 6. 19. 30
Donkey Boiler Fee	£	:	:		
Travelling Expenses (if any)	£	7. 50	:		

NEW YORK JUL 16 1930

Committee's Minute

Assigned See N. Y. 31527

Engineer Surveyor to Lloyd's Register of Shipping.



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