

# REPORT ON MACHINERY.

No. 20224

Received at London Office

TUE. 17 MAY. 1921

Date of writing Report 15<sup>th</sup> Mar 1921 When handed in at Local Office 22<sup>nd</sup> April 1921 Port of NEW YORK

No. in Survey held at Brooklyn State Island Date, First Survey \_\_\_\_\_ Last Survey 19

Reg. Book. \_\_\_\_\_ on the S.S. "H. E. OGILVIE" (Number of Visits \_\_\_\_\_)

Master \_\_\_\_\_ Built at Brooklyn By whom built Libs Yacht Basin Co Tons { Gross 1335.93 Net 785 When built 1921

Engines made at New York By whom made White Fuel Oil Co. (Sold Shipyard) when made 1921

Boilers made at State Island By whom made State Island when made 1921

Registered Horse Power 156 Owners Sinclair Oil Co Port belonging to NEW YORK

Nom. Horse Power as per Section 28 156 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

**ENGINES, &c.**—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 16"-25"-42" Length of Stroke 30" Revs. per minute 110 Dia. of Screw shaft as per rule 8.51 Material of screw shaft Steel as fitted 9.25

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight in the propeller boss Yes If the liner is in more than one length are the joints burned Yes If the 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 Yes If two liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 8'-9 3/8"

Dia. of Tunnel shaft as per rule 7.97 Dia. of Crank shaft journals as per rule 8.31 Dia. of Crank pin 9" Size of Crank webs 18.56x7 Dia. of thrust shaft under collars 8 1/2 Dia. of screw 9'-8" Pitch of Screw 10'-0" No. of Blades 4 State whether moveable No Total surface 29.55 sq ft

No. of Feed pumps Two Diameter of ditto 6" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Bilge pumps Two Diameter of ditto 3 1/2" Stroke 15" Can one be overhauled while the other is at work Yes

No. of Donkey Engines Three Sizes of Pumps 12 1/8" x 12, 7 1/2" x 15 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room Three 3" In Holds, &c. One 3"

No. of Bilge Injections 1 sizes 5" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3"

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valve Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line Above

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

What pipes are carried through the bunkers None How are they protected Yes

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

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Yes

**BOILERS, &c.**—(Letter for record R) Manufacturers of Steel Lukens

Total Heating Surface of Boilers 2476 Is Forced Draft fitted Yes No. and Description of Boilers Two, S.E. Cylindrical

Working Pressure 180 lb Tested by hydraulic pressure to 270 lb Date of test \_\_\_\_\_ No. of Certificate 409 & 410

Can each boiler be worked separately Yes Area of fire grate in each boiler Old Burner No. and Description of Safety Valves to each boiler Two Duplex Pop Area of each valve 4.91 Pressure to which they are adjusted 182 lb Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 3'-0" Mean dia. of boilers 10'-6" Length 11'-0" Material of shell plates Steel

Thickness 1" Range of tensile strength 60000 lb MIN Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double long. seams TRENCH D&S Diameter of rivet holes in long. seams 13/16" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 15 1/2"

Per centages of strength of longitudinal joint rivets 95 Working pressure of shell by rules 207 Size of manhole in shell 19x15" plate 96

Size of compensating ring 15"x1" No. and Description of Furnaces in each boiler 2 Irons Material Steel Outside diameter 43"

Length of plain part top \_\_\_\_\_ bottom ✓ Thickness of plates crown 17/32" Description of longitudinal joint Weld No. of strengthening rings \_\_\_\_\_

Working pressure of furnace by the rules 190 Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 3/4

Pitch of stays to ditto: Sides 7x6 1/4 Back 7x6 1/4 Top 7x7 If stays are fitted with nuts or riveted heads Riveted Working pressure by rules 184

Material of stays Steel Area at smallest part 1.48 sq in Area supported by each stay 49 sq in Working pressure by rules 181 End plates in steam space: Material Steel Thickness 1/16 + 1/2 D Pitch of stays 14x14 How are stays secured Stays Working pressure by rules 20 lb Material of stays Steel

Area at smallest part 3.98 sq in Area supported by each stay 14x14 Working pressure by rules 211 Material of Front plates at bottom Steel

Thickness 1/16 Material of Lower back plate Steel Thickness 1/16 Greatest pitch of stays 13 1/2 x 7 Working pressure of plate by rules 195

Diameter of tubes 3" Pitch of tubes 4x4 1/8 Material of tube plates Steel Thickness: Front 1/16 Back 5/8 Mean pitch of stays 8 5/8

Pitch across wide water spaces 13" Working pressures by rules 186 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7 1/2 x 1 1/2 Length as per rule 28" Distance apart 7" Number and pitch of stays in each 3 @ 7"

Working pressure by rules 208 Steam dome: description of joint to shell \_\_\_\_\_ % of strength of joint \_\_\_\_\_

Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_

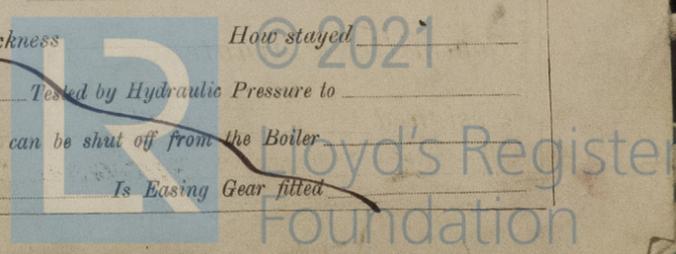
Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_

**SUPERHEATER.** Type \_\_\_\_\_ Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_

Date of Test \_\_\_\_\_ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler \_\_\_\_\_

Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

008040-008048-0123



IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded?

Rpt. 13

SPARE GEAR. State the articles supplied:— *Two Connecting Rod Top & Bottom end bolts and nuts Two main Bearing Bolts Nuts. One set of coupling bolts. One Spur Gear Shaft. One propeller. One Excitator, 3 sets of piston rings. One set of valves for bilge & fuel pumps. Bolts Nuts & Iron of various sizes*

Port

No. in Reg. Book

Owners

Yard No.

DESCR

Capacity

Where

Position

Position

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building: During progress of work in shops -- 1920- Aug 14, 23, Sep 3, 7, 14, 20, Oct 2, 6, Nov 23, Dec 11, 15, 16, 20, 22, 29, 1921- Jan 5-6, Feb 2, 14, 15, 18, 21, 26, 28, Mar 1, 3. Total No. of visits: Is the approved plan of main boiler forwarded herewith *Yes*

Dates of Examination of principal parts: Cylinders 19-10-20 Slides 19-10-20 Covers 19-10-20 Pistons 19-10-20 Rods 19-10-20 Connecting rods 19-10-20 Crank shaft 6-11-20 Thrust shaft 19-10-20 Tunnel shafts ✓ Screw shaft 6-11-20 Propeller 6-11-20 Stern tube 6-11-20 Steam pipes tested 16-2-21 Engine and boiler seatings 8-1-21 Engines holding down bolts 17-2-21 Completion of pumping arrangements 28-2-21 Boilers fixed 18-2-21 Engines tried under steam 28-2-21 Completion of fitting sea connections 28-12-20 Stern tube 28-12-20 Screw shaft and propeller 28-12-20 Main boiler safety valves adjusted 26-2-21 Thickness of adjusting washers *Adjusting nuts* Material of Crank shaft *Steel* Identification Mark on Do. 6-11-20 ✓ Material of Thrust shaft *Steel* Identification Mark on Do. 6-11-20 ✓ Material of Tunnel shafts *Steel* Identification Marks on Do. ✓ Material of Screw shafts *Steel* Identification Marks on Do. 6-11-20 ✓ Material of Steam Pipes *Solid Drawn Steel* Test pressure 540 lbs per sq. in. Is an installation fitted for burning oil fuel *Yes* Is the flash point of the oil to be used over 150°F. *Yes* Have the requirements of Section 49 of the Rules been complied with *Yes* Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *S.S. "MANUEL TIONDA"*

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

*The Machinery of this Vessel has been built under Special Survey in accordance with the Rules & the Approved Plans. The Workmanship & Materials are good. The Machinery has been tried under steam & found satisfactory. This Vessel's Machinery is now in good efficient condition and capable for service + LMC 3.21. Fitted FOR OIL FUEL 3.21 F.P above 150°F.*

**It is submitted that this vessel is eligible for THE RECORD. + LMC. 3.21. FD. CL Fitted for Oil Fuel 3.21 FP above 150°F**

*Roell 23/3/21*

*J.P.S.*

The amount of Entry Fee ... £ 15 : When applied for, Special ... £ 195 : 27 April 1921 Donkey Boiler Fee *P.L.* £ 100 : When received, Travelling Expenses (if any) £ : 20/5/21

*John O. Roblox*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York APR 26 1921

Assigned + LMC. 3.21

CERTIFICATE WRITTEN 17.5.21

