

REPORT ON MACHINERY.

No. 19674

Received at London Office

TUE. 10 JAN 1921

Date of writing Report 2nd Dec 1920 When handed in at Local Office 15th Dec 1920 Port of NEW YORK

No. in Survey held at Brooklyn N.Y. Date, First Survey _____ Last Survey 3rd Dec 1920
Reg. Book. _____ on the S.S. "ORMES" (Number of Visits _____)

Master D. Fitzpatrick Built at Brooklyn N.Y. By whom built Todd Shipyards Corp. Tons { Gross 1354.57
Net 796.16
When built 1920
Engines made at New York By whom made White Fuel Oil Co. (Todd Shipyards) when made 1920
Boilers made at New York By whom made Standard S.P. Corp. when made 1920
Registered Horse Power 245 Owners Donald S.S. Co. Port belonging to Montreal
Nom. Horse Power as per Section 28 245 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion Reciprocating No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 19" x 32" x 52" Length of Stroke 36" Revs. per minute 100 Dia. of Screw shaft as per rule 12.15 Material of screw shaft Steel
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 4'-3"
Dia. of Tunnel shaft as per rule 10" 9.64 Dia. of Crank shaft journals as per rule 10.12 Dia. of Crank pin 11 1/4" Size of Crank webs 6'23" x 42" Dia. of thrust shaft under collars 10 3/4" Dia. of screw 12'-6" Pitch of Screw 14'-6" No. of Blades 4 State whether moveable No Total surface 54.86 sq ft
No. of Feed pumps 2 Diameter of ditto 10' x 6" Stroke 12" Can one be overhauled while the other is at work Yes
No. of Bilge pumps 1 Diameter of ditto 4" Stroke 12" Can one be overhauled while the other is at work Yes
No. of Donkey Engines Three Sizes of Pumps (7 1/2 x 8 1/2 x 10) (10 x 6 x 10) No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 2 @ 3" Dia, One 5" Dia In Holds, &c. 2 @ 3" In Hold, 2 @ 3" After
hold 1-3" Lou Pump, 1-3" After Peak, 1-3" After Well.
No. of Bilge Injections 1 sizes 6" Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size 1/2-5" Dia
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 _____
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 Upper Room Top Platform

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel Lukens
Total Heating Surface of Boilers 3780 Is Forced Draft fitted Yes No. and Description of Boilers Two Vertical
Working Pressure 180 lb Tested by hydraulic pressure to 270 lb Date of test 19th Feb 1920 No. of Certificate 355
Can each boiler be worked separately Yes Area of fire grate in each boiler 100 sq ft No. and Description of Safety Valves to each boiler 2 Spring loaded Area of each valve 7.018" Pressure to which they are adjusted 180 lb Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers or woodwork Yes Mean dia. of boilers 13'-0" Length 11'-6" Material of shell plates Steel
Thickness 1 1/4" Range of tensile strength 60000 lb Are the shell plates welded or flanged No Descrip. of riveting: cir. seams DLAP
long. seams TREBLE DBS Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 8" Lap of plates or width of butt straps 19 3/4"
Per centages of strength of longitudinal joint rivets: 89 Working pressure of shell by rules 184 lb Size of manhole in shell 23' x 9" - 16' x 12" Dorr
plate: 83.6 Size of compensating ring 11" x 1 1/4" No. and Description of Furnaces in each boiler 3 MORRISON Material Steel Outside diameter 44"
Length of plain part top _____ bottom _____ Thickness of plates crown 9/16" Description of longitudinal joint WELD No. of strengthening rings NONE
Working pressure of furnace by the rules 198 Combustion chamber plates: Material Steel Thickness: Sides 9/32" Back 19/32" Top 19/32" Bottom 13/16"
Pitch of stays to ditto: Sides 7 1/2 x 16 1/2" Back 7 1/2 x 16 1/2" Top 7 3/4 x 17 1/2" If stays are fitted with nuts or riveted heads Riveted Working pressure by rules 183
Material of stays Steel Area at smallest part 1.48 sq ft Area supported by each stay 49 Working pressure by rules 243 End plates in steam space: Material Steel Thickness 1" Pitch of stays 16" x 15" How are stays secured D. Nuts Working pressure by rules 192 Material of stays Steel
Area at smallest part 4.91 sq ft Area supported by each stay 240 Working pressure by rules 213 Material of Front plates at bottom Steel
Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" x 1/16" Greatest pitch of stays 13 1/2" x 7 1/2" Working pressure of plate by rules 258
Diameter of tubes 2 1/2" Pitch of tubes 3 7/8" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9 1/8"
Pitch across wide water spaces 13" Working pressures by rules 254 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10 1/2" x 1 3/8" Length as per rule 32" Distance apart 7 3/4" Number and pitch of stays in each 3 @ 7 1/2"
Working pressure by rules 253 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 _____



IS A DONKEY BOILER FITTED? **No**

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— **Two Lap End Bolt Nuts. Two Bottom End Bolt Nuts. Two Drain Bearing Bolt Nuts. Two sets of Coupling Bolt. Two sets feed valve pump valves and spindles. Complete set of piston pump spindles. A quantity of both nuts and iron of various sizes.**

The foregoing is a correct description,

TEBO YACHT BASIN CO

James S. Melue

Manufacturer.

Dates of Survey while building: During progress of work in shops -- 24/6/20, 3/7/20, 13/7/20, 16/7/20, 31/7/20, 23/8/20, 16/10/20, 18/10/20, 19/10/20, 23/10/20, 3/11/20, 19/11/20, 22/11/20, 27/11/20, 3/12/20. During erection on board vessel --- Total No. of visits

Is the approved plan of main boiler forwarded herewith? **No**

Dates of Examination of principal parts—Cylinders 24/6/20 Slides 25/8/20 Covers 23/8/20 Pistons 23/8/20 Rods 13-7-20 Connecting rods 13-7-20 Crank shaft 13-7-20 Thrust shaft 24/6/20 Tunnel shafts 13-7-20 Screw shaft 13-7-20 Propeller 16/7/1920

Stern tube 13-7-20 Steam pipes tested 22-10-20 Engine and boiler seatings 16-8-20 Engines holding down bolts 16-8-20 Completion of pumping arrangements 3-10-20 Boilers fixed 22-10-20 Engines tried under steam 25-10-20

Completion of fitting sea connections 16/7/1920 Stern tube 16/7/1920 Screw shaft and propeller 19/7/1920 Main boiler safety valves adjusted 23-10-20 Thickness of adjusting washers **Lock Nut.**

Material of Crank shaft **Steel** Identification Mark on Do. 4437CK Material of Thrust shaft **Steel** Identification Mark on Do. 44696

Material of Tunnel shafts **Steel** Identification Marks on Do. 21629L Material of Screw shafts **Steel** Identification Marks on Do. 2150GR

Material of Steam Pipes **Solid Drawn Copper** Test pressure **360 lb 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? **No** If so, state name of vessel

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

The Engines of this Vessel, have been constructed under special survey, and in accordance with the rules approved plans, they have now been efficiently fitted on board, tested under steam and found satisfactory. The Case is respectfully submitted for the notation of + LMC 12-20. Fitted for oil fuel 12-20 F.P above 150°F. + Electric Light in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC. 12.20 F.D

FITTED FOR OIL FUEL. 12.20 FP ABOVE 150°F.

Recd. 21/1/21

998

The amount of Entry Fee ... \$15.00 When applied for, 6/1/1921 Special ... \$162.00 When received, 4/1/1921 Donkey Boiler Fee ... £ Travelling Expenses (if any) £

John Robson Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York JAN - 4 1921

Assigned + LMC. 12.20

MACHINERY CERT. WRITTEN 3/2/21 + taken 18/1/21



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Lloyd's Register Foundation

Rpt. 13.

Port of

No. in Reg. Book

Owners

Yard No.

DESCRIPTION

Capacity of

Where is D

Position of

Positions of

If fuses are

circuits

If vessel is

Are the

Are all fuses

are per

Are all swit

Total number

A

B

C

D

E

1M

2

3

If arc lights

Where are

DESCRIPTION

Main cable ca

Branch cable

Branch cable

Leads to lamp

Cargo light ca

DESCRIPTION

Joints in cab

Are all the jo

position

Are there an

How are the