

REPORT ON MACHINERY.

Received at London Office

REC'D NEW YORK Sept. 22-1919. Date of writing Report 16th SEPT. 1919 When handed in at Local Office 7th SEPT. 1919 Port of DETROIT MICH. U.S.A.

No. in Survey held at DETROIT MICH. Date, First Survey 3rd FEB. 1919 Last Survey 11th SEPT. 1919
Reg. Book. on the STEEL SINGLE SCREW STEAMER "LAKE GITANO" (Number of Visits 83) Tons Gross 2606.44 Net 1612

Master Built at WYANDOTTE MICH. By whom built DETROIT SHIPBUILDING CO., When built 1919

Engines made at DETROIT By whom made DETROIT SHIPBUILDING CO., when made 1919

Boilers made at " By whom made " when made 1919

Registered Horse Power Owners U.S. SHIPPING BOARD EMERGENCY FLEET CORP Port belonging to WYANDOTTE MICH.

Nom. Horse Power as per Section 28 352 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 21" x 35" x 59" Length of Stroke 42 Revs. per minute 81 Dia. of Screw shaft as per rule 12.28" Material of screw shaft S as fitted 12.8"

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 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 If two liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 51"

Dia. of Tunnel shaft as per rule 10.96" Dia. of Crank shaft journals as per rule 11.2" Dia. of Crank pin 11.5" Size of Crank webs 14" x 7 1/2" Dia. of thrust shaft under collars 11 5/8" Dia. of screw 15'-0" Pitch of Screw 13'-10" No. of Blades 4 State whether moccable NO Total surface 61 sq ft

No. of Feed pumps 2 Diameter of ditto 10" x 7" x 12" Stroke Can one be overhauled while the other is at work YES

No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 20 Can one be overhauled while the other is at work YES

No. of Donkey Engines 2 Sizes of Pumps 10" x 6" x 10" & 10" x 12" x 12" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room: 3-3" DIA. STOKEHOLD: 2-3" DIA. In Holds, &c. FOREHOLD: 2-3" DIA. AFTERHOLD: 3-3" DIA.

TUNNEL: 1-3" DIA. No. 1 COFFERDAM: 1-3" DIA. No. 2 COFFERDAM: 1-3" DIA.

No. of Bilge Injections 1 size 18" DIA. Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size YES 4" 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

Are all connections with the sea direct on the skin of the ship YES Are they Valves or Cocks BOTH

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 OTHERS 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 DECK

BOILERS, &c.—(Letter for record R) Manufacturers of Steel CARNEGIE STEEL CO.

Total Heating Surface of Boilers 5467 sq ft Is Forced Draft fitted YES No. and Description of Boilers 2 MULTITUBULAR, SINGLE END

Working Pressure 185 Tested by hydraulic pressure to 278 Date of test 5th & 8th MAY 1919 No. of Certificate 276 & 277

Can each boiler be worked separately YES Area of fire grate in each boiler 54.45 sq ft No. and Description of Safety Valves to each boiler 2 SPRING LOADED Area of each valve 9.62 sq ft Pressure to which they are adjusted 187 Are they fitted with easing gear YES

Smallest distance between boilers or bunkers 13 1/2" Mean dia. of boilers 14'-6" Length 11'-0" Material of shell plates S

Thickness 1/32" Range of tensile strength 60,000-71,680 Are the shell plates welded or flanged NO Descrip. of riveting: cir. seams L. S.R. long. seams DBS, T.R. Diameter of rivet holes in long. seams 1 5/16" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 19 3/4"

Per centages of strength of longitudinal joint rivets 88:1 plate 84:6 Working pressure of shell by rules 199.5 Size of manhole in shell 15" x 11"

Size of compensating ring 33" x 33" x 1 1/2" No. and Description of Furnaces in each boiler 3 CORR. Material S Outside diameter 46 1/16"

Length of plain part top Thickness of plates crown 1 1/8" bottom 1 1/16" Description of longitudinal joint WELD No. of strengthening rings NONE

Working pressure of furnace by the rules 191 Combustion chamber plates: Material S Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 5/8"

Pitch of stays to ditto: Sides 6 3/8" x 6 3/8" Back 6 3/8" x 6 3/8" Top 8" x 7 1/2" If stays are fitted with nuts or riveted heads R.H. Working pressure by rules 211.6

Material of stays IRON Area at smallest part 147 sq ft Area supported by each stay 47.26 sq ft Working pressure by rules 187 End plates in steam space: Material S Thickness 1/32" Pitch of stays 6 5/8" x 15 1/2" How are stays secured D. NUTS Working pressure by rules 207.4 Material of stays S

Area at smallest part 5.41 sq ft Area supported by each stay 257.68 sq ft Working pressure by rules 218.3 Material of Front plates at bottom S

Thickness 1/16" Material of Lower back plate S Thickness 5/8" D.B.L.R. Greatest pitch of stays 12 1/2" x 6 3/8" Working pressure of plate by rules 192.6

Diameter of tubes 2 3/4" Pitch of tubes 3 3/4" x 3 3/4" Material of tube plates S Thickness: Front 1/16" Back 1/16" Mean pitch of stays 9 3/8"

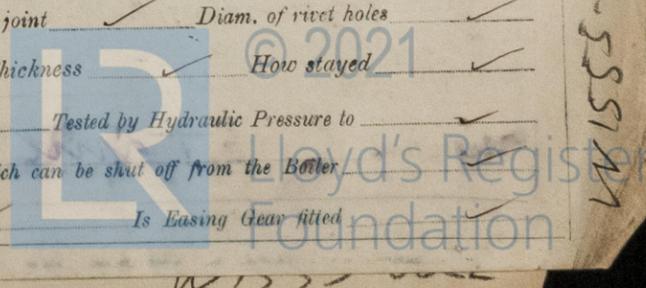
Pitch across wide water spaces 13 1/2" D.B.L.R. Working pressures by rules 190.2 Girders to Chamber tops: Material S Depth and thickness of girder at centre 8 3/4" x 1 1/2" Length as per rule 30 Distance apart 8 Number and pitch of stays in each 3-7 1/2"

Working pressure by rules 226 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



1700-555111

IS A DONKEY BOILER FITTED? No

If so, is a report forwarded?

Rpt. 13.

RE

Port of D

No. in on the Reg. Book Built

Owners U.S. SHIPPING

Yard No. 261

DESCRIPTION OF

2-10K.W. Eng

of the sis

Capacity of Dynam

Where is Dynam

Position of Main S

Positions of auxili

If fuses are fitted

circuits YE

If vessel is wired

Are the fuses of

Are all fuses fitted

are permanent

Are all switches u

Total number of li

A PORT CAB

B " ALLE

C CREW'S QRT

D MACHINERY

E

2 Must he

2 Sid

4 (4 LAM

If are lights, what

Where are the su

DESCRIPTION OF

Main cable carryin

Branch cables car

Branch cables car

Leads to lamps car

Cargo light cables c

DESCRIPTION OF

Cabins: -

Elsewhere

Joints in cables, ho

covered

Are all the joints o

positions, non

Are there any join

How are the cable

in Cabr

SPARE GEAR. State the articles supplied: - 1 Set each of Top and Bott. end brasses, 1 H.P. Valve spindle. 1 Set each of Top and Bott. end, main bearing & coupling bolts. 1 Set each of Lead, Air & Bilge pump valves. 1 Set each of H.P. I.P. & L.P. piston rings and I.P. & L.P. piston ring springs. 1 Set each of H.P. & I.P. Valve rings 20 Boiler tubes. 1 Set of Safety Valve springs, 58 condenser tubes & Ferrules, 1 C.I. Propeller, Assorted Iron, Bolts & Nut.

The foregoing is a correct description,

DETROIT SHIPBUILDING CO. *Jeffrey Sampth* Manufacturer.

Dates of Survey while building: During progress of work in shops: FEB. 3, 10, 17, 25, MAR. 5, 7, 10, 12, 13, 17, 21, 25, 31, APR. 1, 2, 4, 7, 9, 11, 14, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26, 28, 29, 30, MAY 1, 2, 5, 6, 7, 8, 10, 13, 16, 20, 22, 23, 26, 27, 28, JUNE 2, 4, 5, 6, 10, 12, 14, 18, 20, 23, During erection on board vessel: JULY 9, 11, 21, 29, 31, AUG. 2, 5, 8, 11, 13, 14, 18, 19, 20, 21, 25, 26, 27, 28, SEPT. 3, 6, 9, 10, 11, Total No. of visits: 83

Is the approved plan of main boiler forwarded herewith No
" " " donkey " " "

Dates of Examination of principal parts - Cylinders 28-5-19 Slides 10-6-19 Covers 18-6-19 Pistons 18-6-19 Rods 18-6-19 Connecting rods 22-5-19 Crank shaft 12-6-19 Thrust shaft 14-6-19 Tunnel shafts 14-3-19 Screw shaft 26-4-19 Propeller 22-4-19 Stern tube 29-4-19 Steam pipes tested 11-8-19 Engine and boiler seatings 9-7-19 Engines holding down bolts 2-8-19 Completion of pumping arrangements 10-9-19 Boilers fixed 2-8-19 Engines tried under steam 11-9-19 Completion of fitting sea connections 27-5-19 Stern tube 26-5-19 Screw shaft and propeller 26-5-19 Main boiler safety valves adjusted 9-9-19 Thickness of adjusting washers PORT F. 3/4" A. 1 1/8" STARB. F. 5/8" A. 1 1/8" LLOYD'S No 159 Material of Crank shaft S Identification Mark on Do. 6-19 W.R.M. Material of Thrust shaft S Identification Mark on Do. 6-19 W.R.M. LLOYD'S No 159 Material of Tunnel shafts S Identification Marks on Do. 3-19 W.R.M. Material of Screw shaft S Identification Marks on Do. 4-19 W.R.M. LLOYD'S No 159 Material of Steam Pipes SEAMLESS STEEL Test pressure 555 Lbs. 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 "LAKE GILTEDGE" REPORT No 214

General Remarks (State quality of workmanship, opinions as to class, &c.)
These Engines and Boilers have been built under special survey and in accordance with the Rules, the materials and workmanship are sound and good. They have been fitted on board in an efficient manner, tried under steam and found satisfactory. They are, in my opinion, eligible to be classed in the Register Book with the record of LMC-9-19.

It is submitted that this vessel is eligible for THE RECORD. + LMC. 9. 19. FD
Fitted for Oil Fuel 9. 19 FP above 150 F.
W.R.M.

14/10/19 W.R.M.

Certificate (if required) to be sent to DETROIT MICH.

The amount of Entry Fee ... \$ 15 : 00 :
Special ... \$ 188 : 00 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) \$ 4 : 20 :
When applied for, 17th SEP 1919
When received, 24/9/19 W.R.M.

Wm R. Mitchell
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York SEP 23 1919

Assigned + Lmc. 9. 19

