

Rpt. 4.

REPORT ON MACHINERY.

No. 2952

REC'D NEW YORK Sept. 7-1918

Received at London Office

Date of writing Report 17th Aug 1918 When handed in at Local Office 17th Aug 1918 Port of Philadelphia
No. in Survey held at Canden Date, First Survey 26th Oct 1916 Last Survey 16th Aug 1918
Reg. Book. on the S.S. "Winding Gulf" (Number of Visits 71)
Master Canden Built at Canden By whom built New York S. B. Corp (No 192) When built 1918
Engines made at Canden By whom made New York S. B. Corp (No 192) when made 1918
Boilers made at Do By whom made Do when made 1918
Registered Horse Power 463 Owners Emergency Fleet Corporation Port belonging to Canden N. J.
Nom. Horse Power as per Section 28 463 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 25" 41 1/2" 70" Length of Stroke 46" Revs. per minute 80 Dia. of Screw shaft 14" Material of 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 5'-3"
Dia. of Tunnel shaft 12-9 1/2" Dia. of Crank shaft journals 13-4" Dia. of Crank pin 14" Size of Crank webs 26" Dia. of thrust shaft under
collars 13 5/8" Dia. of screw 18-6" Pitch of Screw 15-2" No. of Blades 4 State whether moveable Yes Total surface 91 sq ft
No. of Feed pumps 2 Diameter of ditto 4" Stroke 20" Can one be overhauled while the other is at work Yes
No. of Bilge pumps 2 Diameter of ditto 4 1/2" Stroke 20" Can one be overhauled while the other is at work Yes
No. of Donkey Engines 6 Sizes of Pumps see over page No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room & Blr Rm: 6-3 1/2" 1-2" in tunnel In Holds, &c. 2-3 1/2" in each hold
1-3 1/2" tunnel well
No. of Bilge Injections 1 sizes 10" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes-3 1/2"
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 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 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 top platform

BOILERS, &c.—(Letter for record (7)) Manufacturers of Steel Carnegie Steel Co
Total Heating Surface of Boilers 6634 sq ft Is Forced Draft fitted Yes No. and Description of Boilers 3 Single Ended
Working Pressure 195 lbs Tested by hydraulic pressure to 292 lbs Date of test 17-12-17 No. of Certificate 159
Can each boiler be worked separately Yes Area of fire grate in each boiler 51.66 sq ft No. and Description of Safety Valves to
each boiler double spring loaded Area of each valve 7.06 sq in Pressure to which they are adjusted 190 lbs Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 3'-4" Mean dia. of boilers 13'-10" Length 10'-6 1/2" Material of shell plates steel
Thickness 1 1/16" Range of tensile strength 28/32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D. R.
long. seams T. R. D. B. S. Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 8 3/4" Lap of plates or width of butt straps 20 1/4"
Per centages of strength of longitudinal joint 96.1 Working pressure of shell by rules 208 lbs Size of manhole in shell 16" x 12"
Size of compensating ring 37 x 32 x 1 1/16" No. and Description of Furnaces in each boiler 3 corrugated Material steel Outside diameter 3'-8 1/8"
Length of plain part top 9" Thickness of plates bottom 1 1/16" Description of longitudinal joint weld No. of strengthening rings Yes
Working pressure of furnace by the rules 199 Combustion chamber plates: Material steel Thickness: Sides 19/32" Back 19/32" Top 19/32" Bottom 7/8"
Pitch of stays to ditto: Sides 6 1/8" x 6 1/4" Back 7" x 6 1/2" Top 7 1/2" x 6 1/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 247
Material of stays iron Area at smallest part 1.694 Area supported by each stay 48.75 Working pressure by rules 208 End plates in steam space:
Material steel Thickness 1 1/16" Pitch of stays 17" x 17" How are stays secured D. Nuts Working pressure by rules 267 Material of stays steel
Area at smallest part 6.49 Area supported by each stay 28.9 Working pressure by rules 233 Material of Front plates at bottom steel
Thickness 1 1/16" Material of Lower back plate steel Thickness 1 1/16" Greatest pitch of stays 14" x 7" Working pressure of plate by rules 318
Diameter of tubes 2 1/2" Pitch of tubes 3 3/4" x 3 1/2" Material of tube plates steel Thickness: Front 1 1/16" Back 3/4" Mean pitch of stays plain tubes
Pitch across wide water spaces 13" Working pressures by rules 239 Girders to Chamber tops: Material steel Depth and
thickness of girder at centre 8 1/4" x 20 1/2" Length as per rule 2'-7 1/2" Distance apart 7 1/2" Number and pitch of stays in each 4 @ 6 1/4"
Working pressure by rules 236 Steam dome: description of joint to shell Yes % of strength of joint Yes
Diameter Yes Thickness of shell plates Yes Material Yes Description of longitudinal joint Yes Diam. of rivet holes Yes
Pitch of rivets Yes Working pressure of shell by rules Yes Crown plates Yes Thickness Yes How stayed Yes

UPERHEATER. Type Yes Date of Approval of Plan Yes Tested by Hydraulic Pressure to 2020
Date of Test Yes Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes
ometer of Safety Valve Yes Pressure to which each is adjusted Yes Is Easing Gear fitted Yes

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

✓

SPARE GEAR. State the articles supplied:—2 connecting rod top end bolts & nuts: 2 connecting rod bottom end bolts & nuts: 2 main bearing bolts: 1 set of coupling bolts: 1 set of feed & bilge pump valves: a quantity of assorted bolts & nuts: iron of various sizes: 1 tail shaft: 1 propeller blade: 25 condenser tubes: one set of spare braces for valve stems: 1 set of air pump valves: 1 half set of follower bolts for each size piston

The foregoing is a correct description,

New York Shipbuilding Corporation Manufacturer.

Dates of Survey while building
During progress of work in shops -- 1916 Oct 26 Nov 1 Jan 18 26 Feb 7 27 Mar 6 12 27 Apr 12 19 24 May 7 16 23 31 Jun 7 13 18 27 up to Dec 1917
During erection on board vessel --- July 2 8 10 12 18 23 Aug 8 9 13 16
Total No. of visits 71

Is the approved plan of main boiler forwarded herewith yes

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 27.12.17 Slides 15.4.18 Covers 15.4.18 Pistons 27.2.18 Rods 27.2.18

Connecting rods 27.2.18 Crank shaft 24.12.17 Thrust shaft 18.4.18 Tunnel shafts 18.4.18 Screw shaft 28.3.18 Propeller 15.3.18

Stern tube 22.3.18 Steam pipes tested 10.7.18 Engine and boiler seatings 4.5.18 Engines holding down bolts 2.7.18

Completion of pumping arrangements 16.8.18 Boilers fixed 2.7.18 Engines tried under steam 9.8.18

Completion of fitting sea connections 22.6.18 Stern tube 22.6.18 Screw shaft and propeller 22.6.18

Main boiler safety valves adjusted 9.8.18 Thickness of adjusting washers lock nuts fitted

Material of Crank shaft steel Identification Mark on Do. 192 Material of Thrust shaft steel Identification Mark on Do. 192

Material of Tunnel shafts steel Identification Marks on Do. 192 Material of Screw shafts steel Identification Marks on Do. 192

Material of Steam Pipes copper Test pressure 400 lbs per sq in

Is an installation fitted for burning oil fuel no Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of Section 49 of the Rules been complied with ✓

Is this machinery duplicate of a previous case yes If so, state name of vessel "Glen White"

General Remarks (State quality of workmanship, opinions as to class, &c. Donkey Engines: 12" x 8 1/2" x 18"

12" x 8 1/2" x 18": 10" x 12" x 12" x 12": 6" x 7" x 8": 12" x 14" x 12": 4 1/2" x 3 3/4" x 4"

The machinery of this vessel has been built under special survey: the material and workmanship being good, and proved satisfactory on steam trial

It is submitted that this vessel be eligible for a record of + L. M. C. 8.18 in the Register Book

It is submitted that this vessel is eligible for THE RECORD. + LMC 8.18 F.D.

MACHINERY CERTIFICATE WRITTEN 2-10-18

9-10-18

ARK

The amount of Entry Fee ... \$ 15: 00: When applied for,
Special ... \$ 215: 75: 19
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) \$ 7: 00: 21.9.18

A. T. Thomas.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+ LMC 8.18

MACHINERY CERTIFICATE WRITTEN 2-10-18



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