

REPORT ON MACHINERY.

No. 3205

REC'D NEW YORK April 29 1919

Received at London Office

Date of writing Report 27 April 1919 When handed in at Local Office 27 April 1919 Port of Philadelphia
No. in Survey held at Camden N J Date, First Survey 21 Nov. 1917 Last Survey 17 April 1919
Reg. Book. S. S. Gulf Queen (Number of Visits 57)

Master J. Sigana Built at Camden N J By whom built New York Ship Corp Tons } Gross 6795-85
Engines made at Camden N J By whom made New York Ship Corp } Net 4904
Boilers made Camden N J By whom made New York Ship Corp When built 1919
Registered Horse Power 600 Owners Gulf Refining Company when made 1919
Nom. Horse Power as per Section 28 600 Is Refrigerating Machinery fitted for cargo purposes No when made 1919
Is Electric Light fitted Yes Port belonging to Port Arthur Texas

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 27" 45" 75" Length of Stroke 51" Revs. per minute 80 Dia. of Screw shaft as per rule 15.3 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 5.4"

Dia. of Tunnel shaft as per rule 14 Dia. of Crank shaft journals as per rule 14.75 Dia. of Crank pin 15.75 Size of Crank webs 24 x 11 Dia. of thrust shaft under

collars 15 Dia. of screw 18.0 Pitch of Screw 15.5 No. of Blades 4 State whether moceable Yes Total surface 100.5 sq

No. of Feed pumps 2 Diameter of ditto 2 x 8 Stroke 24 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 direct Diameter of ditto 4 1/2 Stroke 24 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 4 Sizes of Pumps 12 x 10 x 12 5 1/4 x 6 x 6 6 x 5 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Boiler Room 6 @ 3/2 In Holds, &c. By pump Rm. 1. 4 1/2 In hold 2 @ 4 1/2 In pump 1. 0 1/2 In hold 2 @ 2

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 None

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

Dates of examination of completion of fitting of Sea Connections 17-1-19 of Stern Tube 29-10-19 Screw shaft and Propeller 29.10.19

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

BOILERS, &c.—(Letter for record (N)) Manufacturers of Steel Carnegie Steel Co

Total Heating Surface of Boilers 8952.3 sq ft Is Forced Draft fitted Yes No. and Description of Boilers 3 Single Ended

Working Pressure 195 lbs Tested by hydraulic pressure to 292.5 lbs Date of test 4.12.15 No. of Certificate 261

Can each boiler be worked separately Yes Area of fire grate in each boiler 63.25 sq ft No. and Description of Safety Valves to

each boiler Double spring loaded Area of each valve 9.621 Pressure to which they are adjusted 195 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 11" Mean dia. of boilers 15.10" Length 11.4" Material of shell plates Steel

Thickness 1/2" Range of tensile strength 63,000-71,650 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams 2 @ DR

long. seams TR DBS Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 10.25" Lap of plates or width of butt straps 2 3/4"

Per centages of strength of longitudinal joint rivets 85.4% Working pressure of shell by rules 214 Size of manhole in shell 16 x 12

Size of compensating rings 3.0/2 x 2.8/2 No. and Description of Furnaces in each boiler 3 Corrugated Material Steel Outside diameter 4.2/4

Length of plain part top 1/8" Thickness of plates crown 5/8" Description of longitudinal joint Weld No. of strengthening rings 1

Working pressure of furnace by the rules 200 Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 1 1/16"

Pitch of stays to ditto: Sides 7/8 x 7/2 Back 7 x 6 1/2 Top 7/4 x 7/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 252

Material of stays Iron Diameter at smallest part 1.694 Area supported by each stay 50.07 Working pressure by rules 204 End plates in steam space:

Material Steel Thickness 1 1/16" Pitch of stays 17/2 x 17 How are stays secured Nuts Working pressure by rules 212 Material of stays Steel

Diameter at smallest part 2 7/8 Area supported by each stay 297.625 Working pressure by rules 226 Material of Front plates at bottom Steel

Thickness 1" Material of Lower back plate Steel Thickness 1 1/4" Greatest pitch of stays 4/4 x 7/2 Working pressure of by rules 269

Diameter of tubes 2 1/2" Pitch of tubes 3 3/4 x 3 1/2 Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 7 1/2"

Pitch across wide water spaces 13" Working pressures by rules 212 Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 9 x 2 7/4" Length as per rule 35.5 Distance apart 7 1/2" Number and pitch of stays in each 4 @ 7 1/2"

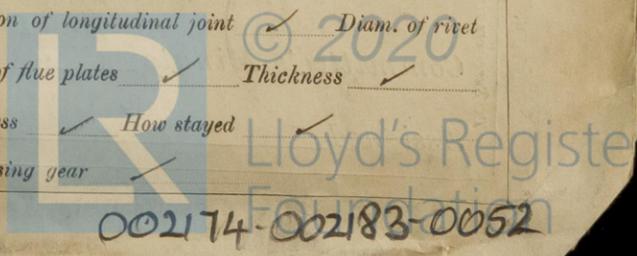
Working pressure by rules 249 Superheater or Steam chest; how connected to boiler Yes Can the superheater be shut off and the boiler worked

separately Yes Diameter Yes Length 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 Diameter of flue Yes Material of flue plates Yes Thickness Yes

If stiffened with rings Yes Distance between rings Yes Working pressure by rules Yes End plates: Thickness Yes How stayed Yes

Working pressure of end plates Yes Area of safety valves to superheater Yes Are they fitted with easing gear Yes



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IS A DONKEY BOILER FITTED?

Yes

If so, is a report now forwarded?

Yes

SPARE GEAR. State the articles supplied: - 1 Set of Crosshead braces with nuts and bolts complete
1 Set of Crank Pin braces with bolts and nuts complete: 2 Main bearing bolts: 1 Set
of Coupling bolts: 1 Set of Bilge & Feed pump valves: F.P. M.P. & L.P. Valve stem studs &
braces: 1 Set of Piston springs for each Piston: 1 Spare Propeller: 1 Eccentric
strap Complete: 12 Condenser tubes 50 fowells: 1 Dry plain & 1 Dry Stay tubes:
100 Assorted bolts & nuts: plates of iron & brass of assorted sizes

The foregoing is a correct description,

New York Shipbuilding Corp.

Manufacturer.

Dates of Survey while building: During progress of work in shops - - Nov. 21. 26. 1917. Jan. 22. 30. Feb. 14. 22. 27. March 28. April 25. June 14. 21. 28. July 2. 12. 18. 23 Aug
During erection on board vessel - - 13. Sept. 23. Oct. 2. 8. 14. 23. 29. Nov. 5. 6. 8. 15. 16. 21. 29. Dec. 4. 11. 19. 30. 31. 1918. Jan. 6. 10. 17. 24
Total No. of visits 30. Is the approved plan of main boiler forwarded herewith Yes
" " " donkey " " " Yes

Dates of Examination of principal parts - Cylinders 16. 10. 18 Slides 16. 10. 18 Covers 6. 12. 18 Pistons 21. 10. 18 Rods 21. 10. 18

Connecting rods 6. 10. 18 Crank shaft 21. 10. 18 Thrust shaft 6. 10. 18 Tunnel shafts ✓ Screw shaft 29. 10. 18 Propeller 20. 2. 19

Stern tube 20. 2. 19 Steam pipes tested 7- 4. 19 Engine and boiler seatings 19. 12. 18 Engines holding down bolts 27. 2. 19

Completion of pumping arrangements 4. 4. 19 Boilers fixed 30. 12. 19 Engines tried under steam 12. 4. 19

Main boiler safety valves adjusted 1. 4. 19 Thickness of adjusting washers Lock nuts

Material of Crank shaft Steel Identification Mark on Do. 169 Material of Thrust shaft Steel Identification Mark on Do. 169

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Steel Identification Marks on Do. 169

Material of Steam Pipes Steel Test pressure 585 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 No If so, state name of vessel

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

The Machinery and Boilers have been built under Special Survey the material and workmanship being good

The Boilers were subjected to Hydraulic test of 292.5 lbs with satisfactory results

The Machinery has been well fitted aboard and proved satisfactory on steam trial

It is submitted that the vessel be eligible for a record of + L.M.C. 4. 19 in the Register Book; also notation of Fitted for oil fuel 4. 19 Flash point above 150°F.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 4. 19. F.II Fitted for oil fuel 4. 19 F. Above 150°F. Reth 20/5/19.

The amount of Entry Fee ... £ 15. 00 : When applied for.
Special ... £ 250. 00 : 10th April 1919
Donkey Boiler Fee ... £ : When received.
Travelling Expenses (if any) £ 6. 00 : 24/5/19

A. T. Thomas & J. Adams
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute New York APR 29 1919
Assigned + d.m.c. 4. 19

