

Port of

PHILADELPHIA.

Received at London Office

MON. JAN. 13. 1913.

No. in Survey held at

PHILADELPHIA.

Date, first Survey

Jan 19-1912

Last Survey

Dec 14 1912

Reg. Book.

Supp 29 on the

s.s. Gulfoil

(Number of Visits 52)

Gross 5188.69

Net 3202.00

When built 1912-12

Master H. Kort

Built at

Camden N.J.

By whom built

New York Shipbuilding Co

Engines made at

Camden N.J.

By whom made

New York Shipbuilding Co

when made

12-1912-12

Boilers made at

- do -

By whom made

- do -

when made

12-1912-12

Registered Horse Power

543

Owners

Gulf Refining Co

Port belonging to

Port Arthur, Tex.

Nom. Horse Power as per Section 28

543

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 27" 45" 75"

Length of Stroke 48"

Revs. per minute 70

Dia. of Screw shaft

15.11"

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

soldered

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

fitted close

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush 5' 9"

Dia. of Tunnel shaft as per rule

Dia. of Crank shaft journals as per rule

14.35"

Dia. of Crank pin 15"

Size of Crank webs 24" 11"

Dia. of thrust shaft under

collars 14 3/4"

Dia. of screw 18.0"

Pitch of Screw 18.3"

No. of Blades 4

State whether moveable

yes

Total surface 74 sq ft

No. of Feed pumps 2

Diameter of ditto 12-8 1/2"

Stroke 18"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps 2

Diameter of ditto 4 1/2"

Stroke 22"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines 4

Sizes of Pumps 12x10 1/2", 12x14 1/2", (2) 5 1/2x4 1/2"

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 5-3 1/2"

In Holds, &c.

After pump room 2-3 1/2" for pump

No. of Bilge Injections 1

sizes 10"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

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 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

Dates of examination of completion of fitting of Sea Connections 23-8-12 of Stern Tube 23-8-12 Screw shaft and Propeller 23-8-12

Is the Screw Shaft Tunnel watertight no tunnel Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record 7) Manufacturers of Steel North Bros. Louisville

Total Heating Surface of Boilers 7843 sq ft Is Forced Draft fitted yes No. and Description of Boilers 3. Single ended, multi.

Working Pressure 190 lbs Tested by hydraulic pressure to 285 lbs Date of test 31-5-12 No. of Certificate 33

Can each boiler be worked separately yes Area of fire grate in each boiler 57.75 sq ft No. and Description of Safety Valves to

each boiler 2. Direct Spring Area of each valve 8.29 sq ft Pressure to which they are adjusted 190 lbs Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers 10", oil bunkers Mean dia. of boilers 14-9 5/16" Length 11-2 1/4" Material of shell plates Steel

Thickness 1 5/16" Range of tensile strength 29.32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams A.T.

long. seams D.B.S.T.R. Diameter of rivet holes in long. seams 1 7/16" Pitch of rivets 9 5/16" Lap of plates or width of butt straps 20 1/4"

Per centages of strength of longitudinal joint rivets 84.5 Working pressure of shell by rules 199 lbs Size of manhole in shell 16" 12"

Size of compensating ring 3 1/2x3 1/4x1 5/16" No. and Description of Furnaces in each boiler 3. Morrison Material Steel Outside diameter 46 7/16"

Length of plain part top 3 Thickness of plates crown 19 Bottom 32 Description of longitudinal joint welded No. of strengthening rings

Working pressure of furnace by the rules 204 lbs Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 5/8"

Pitch of stays to ditto: Sides 7x7 1/2" Back 7x7 1/2" Top 7x7 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 256 lbs

Material of stays Iron Diameter at smallest part 1.81" Area supported by each stay 52.5 sq in Working pressure by rules 258 lbs End plates in steam space:

Material Steel Thickness 1 3/8" Pitch of stays 7x15 1/2" How are stays secured D.N. Working pressure by rules 218 lbs Material of stays Steel

Diameter at smallest part 2 1/4" Area supported by each stay 259 sq in Working pressure by rules 234 lbs Material of Front plates at bottom Steel

Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 15 1/2x7 1/2" Working pressure of plate by rules 275 lbs

Diameter of tubes 2 1/2" Pitch of tubes 3 1/2x3 1/2" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9 3/8"

Pitch across wide water spaces 17 1/2" Working pressures by rules 235 lbs Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 9x1 3/4" Length as per rule 33 1/2" Distance apart 7 1/2" Number and pitch of stays in each 4-7"

Working pressure by rules 252 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

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

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

42-0106

VERTICAL DONKEY BOILER—

Manufacturers of Steel

Wark Bros. Co. Astoria

No. 1

Description

Vertical multitubular

Made at Camden

By whom made

New York & Co.

When made 1912

Where fixed

Stokholm

Working pressure 20# tested by hydraulic pressure to

180#

Date of test Sept. 9. 1912

No. of Certificate 35

Fire grate area 4#

Description of Safety

Valves direct spring

No. of Safety Valves 1

Area of each 3.14

Pressure to which they are adjusted 120#

Date of adjustment 12.12.1912

If fitted with easing gear

If steam from main boilers can enter the donkey boiler

No

Dia. of donkey boiler 34 1/2"

Length 5.9'

Material of shell plates Steel

Thickness 5/16"

Range of tensile strength 28.32

Descrip. of riveting long. seams lap d.T.

Dia. of rivet holes 1 1/16"

Whether punched or drilled Drill

Pitch of rivets 2.28"

Lap of plating 3 1/2"

Per centage of strength of joint

Rivets 70

Working pressure of shell by rules 25 1/2#

Thickness of shell crown plates 3/8"

Radius of do. 4 1/2"

No. of stays to do. 11

Dia. of stays 1 1/2"

Description of joint lap S.R.

Diameter of furnace Top 28 1/2"

Bottom 28"

Length of furnace 25'

Thickness of furnace plates 3/8"

Stays by tubes all headed

Working pressure of furnace by rules 138 1/2#

Thickness of furnace crown plates 3/8"

Stays by tubes all headed

Diameter of uptake tubes

Thickness of uptake plates

Thickness of water tubes 1/2 1/8"

Dates of survey

July 24. Aug 6. Sept 10. Oct 2. Dec 12. 1912

SPARE GEAR. State the articles supplied:—

1 Section of crank shaft. 1 tail shaft. 1 prop boss
74 blades. 1 set crosshead crank pin main bearing bushes & bolts
nuts. 1 Guide shoe. 1 eccentric strap. 1 Air pump rod. 1 Impeller shaft. 2 full
outfit of pump valves for main & auxiliary. 100 assorted bolts & iron work
1 set coupling bolts.
The foregoing is a correct description.

Hallagren Manufacturer.

Dates of Survey while building

During progress of work in shops—
During erection on board vessel—
Total No. of visits 52.

Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " " Yes

Dates of Examination of principal parts—Cylinders 17.5.12 Slides 17.5.12 Covers 17.5.12 Pistons 17.5.12 Rods 17.5.12

Connecting rods 17.5.12 Crank shaft 10.6.12 Thrust shaft 10.6.12 Tunnel shafts ✓ Screw shaft 18.7.12 Propeller 23.8.12

Stern tube 23.8.12 Steam pipes tested 12.12.12 Engine and boiler seatings 16.9.12 Engines holding down bolts 16.9.12

Completion of pumping arrangements 29.11.12 Boilers fixed 19.9.12 Engines tried under steam 11.12.12

Main boiler safety valves adjusted 12.12.12 Thickness of adjusting washers Port. F 1 1/2" A 7/8" S.B. F 7/8" A 7/8" F.B. F 3/8" A 3/4"

Material of Crank shaft Steel Identification Mark on Do. 763 Material of Thrust shaft Steel Identification Mark on Do. 763

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Steel Identification Marks on Do. 763

Material of Steam Pipes Solid drawn steel ✓ Test pressure 285 1/2#

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

The machinery of this vessel has been constructed & installed under Special Survey. The workmanship is found to be good. This vessel has been fitted to burn liquid fuel in accordance with the requirements of Sect. 49 of the Rules on oil fuel. The method used is mechanical atomization. The Schute and Koerting system burners has been installed upon trial were found to work well. The donkey boiler is not fitted for liquid fuel.

The machinery of this vessel was found to work well under steam & is in my opinion eligible for the record of + L MC 12.12, fitted for liquid fuel, in the Register Book.

The amount of Entry Fee... \$15.00
Special... £236.25
Donkey Boiler Fee... \$10.50
Traveling Expenses (if any) \$25.00

When applied for.

26.12.1912

When received.

21.1.1913

Robert Haig
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

FRI. JAN. 17. 1913

Assigned

+ L.M.C. 12.12

Fitted for oil fuel 12.12.12

