

# REPORT ON MACHINERY.

Received at London Office

Date of writing Report 19<sup>th</sup> Jan'y 1920 When handed in at Local Office

Port of Buffalo N.Y.

MON NOV 15 1920

No. in Survey held at Buffalo N.Y.  
Reg. Book. on the

Date, First Survey 28<sup>th</sup> Aug 1919 Last Survey 19  
(Number of Visits Hull No 23)

Tons <sup>Gross</sup> <sub>Net</sub>  
When built

Master Built at Bath-Maine By whom built Texas Shipbuilding Co

Engines made at Buffalo N.Y. By whom made H.G. Trout Co (Engine No 66) when made 1-20

Boilers made at \_\_\_\_\_ By whom made \_\_\_\_\_ when made \_\_\_\_\_

Registered Horse Power 643 Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted for cargo purposes \_\_\_\_\_ Is Electric Light fitted \_\_\_\_\_

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 26 1/2" - 44" - 74" Length of Stroke 51 Revs. per minute 75 Dia. of Screw shaft <sup>as per rule</sup> 14.71" Material of 0.2HS  
<sub>as fitted</sub> 15.5" screw shaft

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 \_\_\_\_\_  
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 63.75"

Dia. of Tunnel shaft <sup>as per rule</sup> \_\_\_\_\_ <sub>as fitted</sub> \_\_\_\_\_ Dia. of Crank shaft journals <sup>as per rule</sup> 14.44" <sub>as fitted</sub> 14.75" Dia. of Crank pin 14.75" Size of Crank webs 28x10" Dia. of thrust shaft under collars 14.75" Dia. of screw 17'-9" Pitch of Screw 18'-0" No. of Blades 4 State whether moveable No Total surface 87 sq

No. of Feed pumps \_\_\_\_\_ Diameter of ditto \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
No. of Bilge pumps 2 Diameter of ditto 5 1/2" Stroke 24" Can one be overhauled while the other is at work yes

No. of Donkey Engines \_\_\_\_\_ Sizes of Pumps \_\_\_\_\_ No. and size of Suctions connected to both Bilge and Donkey pumps \_\_\_\_\_

In Engine Room \_\_\_\_\_ In Holds, &c. \_\_\_\_\_

No. of Bilge Injections \_\_\_\_\_ sizes \_\_\_\_\_ Connected to condenser, or to circulating pump \_\_\_\_\_ Is a separate Donkey Suction fitted in Engine room & size \_\_\_\_\_

Are all the bilge suction pipes fitted with roses \_\_\_\_\_ Are the roses in Engine room always accessible \_\_\_\_\_ Are the sluices on Engine room bulkheads always accessible \_\_\_\_\_

Are all connections with the sea direct on the skin of the ship \_\_\_\_\_ Are they Valves or Cocks \_\_\_\_\_

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates \_\_\_\_\_ Are the Discharge Pipes above or below the deep water line \_\_\_\_\_

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel \_\_\_\_\_ Are the Blow Off Cocks fitted with a spigot and brass covering plate \_\_\_\_\_

What pipes are carried through the bunkers \_\_\_\_\_ How are they protected \_\_\_\_\_

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times \_\_\_\_\_

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges \_\_\_\_\_

Is the Screw Shaft Tunnel watertight \_\_\_\_\_ Is it fitted with a watertight door \_\_\_\_\_ worked from \_\_\_\_\_

BOILERS, &c.—(Letter for record \_\_\_\_\_) Manufacturers of Steel \_\_\_\_\_

Total Heating Surface of Boilers \_\_\_\_\_ Is Forced Draft fitted \_\_\_\_\_ No. and Description of Boilers \_\_\_\_\_

Working Pressure \_\_\_\_\_ Tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_

Can each boiler be worked separately \_\_\_\_\_ Area of fire grate in each boiler \_\_\_\_\_ No. and Description of Safety Valves to each boiler \_\_\_\_\_

Area of each valve \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Are they fitted with easing gear \_\_\_\_\_

Smallest distance between boilers or uptakes and bunkers or woodwork \_\_\_\_\_ Mean dia. of boilers \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_

Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are the shell plates welded or flanged \_\_\_\_\_ Descrip. of riveting: cir. seams \_\_\_\_\_

long. seams \_\_\_\_\_ Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plates or width of butt straps \_\_\_\_\_

Per centages of strength of longitudinal joint <sup>rivets</sup> \_\_\_\_\_ <sub>plate</sub> \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Size of manhole in shell \_\_\_\_\_

Size of compensating ring \_\_\_\_\_ No. and Description of Furnaces in each boiler \_\_\_\_\_ Material \_\_\_\_\_ Outside diameter \_\_\_\_\_

Length of plain part <sup>top</sup> \_\_\_\_\_ <sub>bottom</sub> \_\_\_\_\_ Thickness of plates <sup>crown</sup> \_\_\_\_\_ <sub>bottom</sub> \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ No. of strengthening rings \_\_\_\_\_

Working pressure of furnace by the rules \_\_\_\_\_ Combustion chamber plates: Material \_\_\_\_\_ Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_

Pitch of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ If stays are fitted with nuts or riveted heads \_\_\_\_\_ Working pressure by rules \_\_\_\_\_

Material of stays \_\_\_\_\_ Area at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ End plates in steam space: \_\_\_\_\_

Material \_\_\_\_\_ Thickness \_\_\_\_\_ Pitch of stays \_\_\_\_\_ How are stays secured \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of stays \_\_\_\_\_

Area at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Material of Front plates at bottom \_\_\_\_\_

Thickness \_\_\_\_\_ Material of Lower back plate \_\_\_\_\_ Thickness \_\_\_\_\_ Greatest pitch of stays \_\_\_\_\_ Working pressure of plate by rules \_\_\_\_\_

Diameter of tubes \_\_\_\_\_ Pitch of tubes \_\_\_\_\_ Material of tube plates \_\_\_\_\_ Thickness: Front \_\_\_\_\_ Back \_\_\_\_\_ Mean pitch of stays \_\_\_\_\_

Pitch across wide water spaces \_\_\_\_\_ Working pressures by rules \_\_\_\_\_ Girders to Chamber tops: Material \_\_\_\_\_ Depth and \_\_\_\_\_

thickness of girder at centre \_\_\_\_\_ Length as per rule \_\_\_\_\_ Distance apart \_\_\_\_\_ Number and pitch of stays in each \_\_\_\_\_

Working pressure by rules \_\_\_\_\_ Steam dome: description of joint to shell \_\_\_\_\_ % of strength of joint \_\_\_\_\_

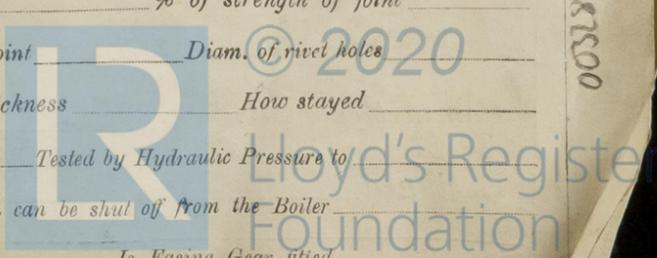
Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_

Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_

UPERHEATER. 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 \_\_\_\_\_



520062500 281500

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

*H.C. Trout*

Manufacturer. *for H.C. Trout Co*

Dates of Survey while building	{ During progress of work in shops - - } { During erection on board vessel - - - } Total No. of visits	AUG 28 - SEPT. 3-4-5-8-17-29 - OCT. 1-7-13-15-20-28 - NOV 3-15-18-26 - DEC 5-6-16-30 - JAN 7-
		1919. — 19

Is the approved plan of main boiler forwarded herewith

“ “ “ donkey “ “ “

Dates of Examination of principal parts—Cylinders 13-10-19 Slides 13-10-19 Covers 13-10-19 Pistons 13-10-19 Rods 20-10-

Connecting rods 20-10-19 Crank shaft 20-10-19 Thrust shaft 7-1-20 Tunnel shafts. NONE. Screw shaft 12-19 Propeller 28-8-

Stern tube 17-9-19 Steam pipes tested Engine and boiler seatings Engines holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft O.H.S. Identification Mark on Do. 20-10-19 F.M. Material of Thrust shaft O.H.S. Identification Mark on Do.

Material of Tunnel shafts — Identification Marks on Do. Material of Screw shafts O.H.S. Identification Marks on Do.

Material of Steam Pipes Test pressure

Is an installation fitted for burning oil fuel 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 Texas S. B. Co Hull 22.

General Remarks (State quality of workmanship, opinions as to class, &c. These engines have been constructed under Special Survey. The material and workmanship employed in their manufacture are sound and good. They have been forwarded to Bath. Maine to be fitted on board Hull 22, being built by the Texas S. B. Co

Certificate (if required) to be sent to

The amount of Entry Fee ... £	:	:	When applied for,
1/2 <sup>nd</sup> Special Buffalo Forgings	\$ 86	90	19
Donkey Boiler Fee	40	00	
Travelling Expenses (if any) £	:	:	When received,
			1/11/20

*J. W. Weddell*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York NOV - 3, 1920  
Assigned See Bod. Rpt 1414

