

# REPORT ON BOILERS.

No. 2566

REC'D NEW YORK

May 22 1917

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No. in Survey held at Wilmington Del. Date, First Survey \_\_\_\_\_ Last Survey \_\_\_\_\_ 191  
 Reg. Book. 555 on the S/S. "BENJAMIN BREWSTER" (Number of Visits) } Gross 5600.  
 } Net \_\_\_\_\_  
 Master Built at Wilmington By whom built Harlan & Hollingsworth When built 1914.  
 Engines made at Wilmington By whom made Harlan & Hollingsworth When made 1914.  
 Boilers made at Wilmington By whom made Harlan & Hollingsworth When made 1914.  
 Registered Horse Power Owners Standard Oil Co of New York Port belonging to Bayonne N.J.

## MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel Lukens I & Co.

(Letter for record S.) Total Heating Surface of Boiler 1344 sq ft Is forced draft fitted no. No. and Description of

Boiler One single ended. Working Pressure 180 Tested by hydraulic pressure to 240 Date of test 16-2-17

No. of Certificate 117 Can each boiler be worked separately yes Area of fire grate in each boiler 43.75 sq ft No. and Description of

safety valves to each boiler Two direct spring Area of each valve 4.9 sq in Pressure to which they are adjusted 180

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler yes

Smallest distance between boilers or uptakes and bunkers or woodwork 8'-0" Mean dia. of boilers 11'-0 3/32" Length 11'-9"

Material of shell plates Steel Thickness 3/32" Range of tensile strength 28/32 Are the shell plates welded or flanged no.

Descrip. of riveting: cir. seams DR Lap long. seams TR. DBS. Diameter of rivet holes in long. seams 1/8" Pitch of rivets 6 1/2"

Lap of plates or width of butt straps 16 1/4" Per centages of strength of longitudinal joint rivets 93.9 plate 82.6 Working pressure of shell by

rules 184.5 Size of manhole in shell 12 x 16 Size of compensating ring 30 x 34 x 3/32" No. and Description of Furnaces in each

boiler 2 hoizons Material Steel (Outside diameter 46 1/8" Length of plain part 191 Thickness of plates crown 9" bottom 16"

Description of longitudinal joint weld No. of strengthening rings 21 Working pressure of furnace by the rules 191 Combustion chamber

plates: Material Steel Thickness: Sides 3/32" Back 3/32" Top 13/32" Bottom 1/16" Pitch of stays to ditto: Sides 7/2" x 7/2" Back 7/2" x 7/2"

Top 7/2" x 7/2" If stays are fitted with nuts or riveted heads riveted heads Working pressure by rules 196 Material of stays Steel Area at

smallest part 1.521 Area supported by each stay 56.25 Working pressure by rules 216 End plates in steam space: Material Steel Thickness 3/32"

Pitch of stays 15 x 15 How are stays secured DN & W Working pressure by rules 184 Material of stays Steel Area at smallest part 4.62 sq in

Area supported by each stay 225 Working pressure by rules 213 Material of Front plates at bottom Steel Thickness 3/4" Material of

Lower back plate Steel Thickness 29/32" Greatest pitch of stays 12 1/2" Working pressure of plate by rules 267 Diameter of tubes 2 3/4"

Pitch of tubes 4" x 3 3/4" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9.75 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 1 3/4" Length as per rule 33" Distance apart 7 1/2" Number and pitch of Stays in each 3 - 7 1/2"

Working pressure by rules 239 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 \_\_\_\_\_

The foregoing is a correct description,  
H. J. Carnes Chief Engineer Harlan & Hollingsworth Manufacturer.

Is the approved plan of boiler forwarded herewith \_\_\_\_\_

Total No. of visits \_\_\_\_\_

Dates of Survey } During progress of work in shops - -  
while building } During erection on board vessel - - -

See Report 4.

## GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

See Report 4.

Survey Fee ... £ : : When applied for, 15-5 1917  
Travelling Expenses (if any) £ : : When received, 191

Committee's Minute New York MAY 24 1917

Assigned See other report (Phil. 2566)

J. Bellock  
Engineer Surveyor to Lloyd's Register of Shipping.