

# REPORT ON BOILERS.

Registered at London Office

Date of writing Report Oct 4 1919 When handed in at Local Office Oct 8 1919 Port of Philadelphia  
 No. in Survey held at Lechester Pa Date, First Survey Feb 6 1919 Last Survey March 26 1919  
 Reg. Book. S. S. & A Morse (Number of Visits 6) } Gross  
 on the } Net  
 Master Built at Alexandria Va By whom built Virginia S. B. Co. When built  
 Engines made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_  
 Boilers made at Lechester Pa By whom made Sun Ship Bldg Co When made 1919  
 Registered Horse Power \_\_\_\_\_ Owners United States Shipping Board Port belonging to Washington

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~—Manufacturers of Steel Lukens S & F Co.

(Letter for record Y) Total Heating Surface of Boilers 8331 Is forced draft fitted \_\_\_\_\_ No. and Description of

Boilers 3 S.E. Scotch Marine Working Pressure 190 Tested by hydraulic pressure to 285 Date of test 26-3-19

No. of Certificate 310 Can each boiler be worked separately \_\_\_\_\_ Area of fire grate in each boiler 61.8 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 \_\_\_\_\_ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler \_\_\_\_\_

Smallest distance between boilers or uptakes and bunkers or woodwork \_\_\_\_\_ Mean dia. of boilers 11'-4 1/2" Length 11'-7 1/8"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 60571680 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams DR-L long. seams TR DBS Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 8" 1/16"

Lap of plates or width of butt straps 20 3/4" Per centages of strength of longitudinal joint \_\_\_\_\_ Working pressure of shell by

rules 204 Size of manhole in shell 12" x 16" Size of compensating ring Flange No. and Description of Furnaces in each

boiler 3 Morrison Material Steel Outside diameter 49 1/4" Length of plain part \_\_\_\_\_ Thickness of plates \_\_\_\_\_

Description of longitudinal joint Weld No. of strengthening rings \_\_\_\_\_ Working pressure of furnace by the rules 204 Combustion chamber

plates: Material Steel Thickness: Sides 7/8" Back 3/4" Top 7/8" Bottom 7/16" Pitch of stays to ditto: Sides 4 1/2" x 7/8" Back 8 1/2" x 8 1/2"

Top 4 1/8" x 7 1/4" stays are fitted with nuts or riveted heads Riveted heads Working pressure by rules 193 Material of stays W.J Diameter at

smallest part 1.99" Area supported by each stay 42.25" Working pressure by rules 207 End plates in steam space: Material Steel Thickness 1 1/8"

Pitch of stays 16 1/4" x 15 1/2" How are stays secured D.N.W.S Working pressure by rules 196 Material of stays Steel Diameter at smallest part 5.93"

Area supported by each stay 219.6" Working pressure by rules 237 Material of Front plates at bottom Steel Thickness 1" Material of

Lower back plate Steel Thickness 1 1/16" Greatest pitch of stays 13" Working pressure of plate by rules 268 Diameter of tubes 2 1/2"

Pitch of tubes 3 1/4" x 3 1/2" Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 9" 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 1/4" x 1 3/4" Length as per rule 35" Distance apart 7 3/4" Number and pitch of Stays in each 4 - 7 1/8"

Working pressure by rules 237 Superheater or Steam chest: how connected to boiler \_\_\_\_\_ 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 \_\_\_\_\_

The foregoing is a correct description,  
Robert H. ... Manufacturer.  
**SUN SHIPBUILDING COMPANY**

Dates of Survey } During progress of work in shops -- } Feb 6-13-24 } March 12-19-26 } Is the approved plan of boiler forwarded herewith No  
 while building } During erection on board vessel --- } \_\_\_\_\_ } \_\_\_\_\_ } Total No. of visits \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under special  
Survey, in accordance with the approved plans, the workmanship & materials are good.  
United States Shipping Board Boilers Nos 5141, 5142, 5143. The boilers have been shipped to Alexandria  
Virginia, to be installed on a vessel.

Survey Fee ... 225.00 : } When applied for, May 31 1919  
 Travelling Expenses (if any) 6.00 : } When received, Aug 11 1919

Committee's Minute  
 Assigned

New York FEB - 3 1920  
See Bal Rpt 2766

Wm. R. ...  
 Engineer Surveyor to Lloyd's Register of Shipping.



W127-0030