

## REPORT ON BOILERS.

No. 884

Received at London Office

TUE - 4 APR. 1916

Date of writing Report March 20<sup>th</sup> 1916 When handed in at Local Office March 20<sup>th</sup> 1916 Port of Newport News 12  
 No. in Survey held at Newport News 12 Date, First Survey June 15<sup>th</sup> 1915 Last Survey March 16<sup>th</sup> 1916  
 Reg. Book. ✓ on the STEEL S.S. "CHARLES TRATT" (Number of Visits 9) Gross 9059 Tons Net 6704  
 Master J. H. Lingo Built at Newport News By whom built N. H. S. & D. D. Co When built 1916-3  
 Engines made at Newport News By whom made N. H. S. & D. D. Co when made 1916  
 Boilers made at Newport News By whom made N. H. S. & D. D. Co when made 1916  
 Registered Horse Power 628 Owners Standard Oil Co. N.Y. Port belonging to Bayamon N.Y.

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR DONKEY.~~ Manufacturers of Steel LUKEN'S & S. Ia.

(Letter for record S.) Total Heating Surface of Boilers 12234 Is forced draft fitted No No. and Description of Boilers One Scotch S.E. Working Pressure 180 Tested by hydraulic pressure to 270 Date of test 6.8.15

No. of Certificate 124 Can each boiler be worked separately ✓ Area of fire grate in each boiler 394 No. and Description of safety valves to each boiler Two: 2 1/2" Spring Area of each valve 4.90" Pressure to which they are adjusted 180 lb.  
 Are they fitted with easing gear ✓ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork 12 1/2" Mean dia. of boilers 10' 11" Length 10' 10 1/2"

Material of shell plates S. Thickness 3 1/2" Range of tensile strength 28-32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams DRK. long. seams DRK. TR. Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 6 3/8"

Lap of plates or width of butt straps 17 3/4" Per centages of strength of longitudinal joint rivets 103 Working pressure of shell by rules 180 Size of manhole in shell 16" x 12" Size of compensating ring 38" x 34" No. and Description of Furnaces in each boiler 2. Morrison Material S. Outside diameter 43 1/2" Length of plain part top 17' 1/2" bottom 17' Thickness of plates crown 1 1/2" bottom 3/4"

Description of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 189 Combustion chamber plates: Material S. Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 7/8" Pitch of stays to ditto: Sides 1/2" x 1/2" Back 1/2" x 1/2"

Top 7" x 7 1/2" If stays are fitted with nuts or riveted heads NUTS. Working pressure by rules 208 Material of stays S. Diameter at smallest part 1 1/4" Area supported by each stay 56" Working pressure by rules 210 End plates in steam space: Material S. Thickness 3/4"

Pitch of stays 14" x 14" How are stays secured DRK. Working pressure by rules 188 Material of stays S. Diameter at smallest part 2 1/4"

Area supported by each stay 196 Working pressure by rules 211 Material of Front plates at bottom S. Thickness 3/4" Material of lower back plate S. Thickness 3/4" Greatest pitch of stays 1 1/2" x 1 1/2" Working pressure of plate by rules 316 Diameter of tubes 2 3/4"

Pitch of tubes 4 x 3 3/4" Material of tube plates S. Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9 3/4" Pitch across wide water spaces 12 3/4" Working pressures by rules 212 Girders to Chamber tops: Material S. Depth and thickness of

order at centre 2: 9 x 3 3/4" Length as per rule 33" Distance apart 7" Number and pitch of Stays in each 3. 7 1/2"

Working pressure by rules 204 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

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

f 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,

By W. H. Duman Manufacturer.

Dates During progress of work in shops: June 15<sup>th</sup> 18, 22, 29. July 9, 26, 29 Is the approved plan of boiler forwarded herewith ✓

Survey while building: During erection on board vessel: Aug. 6<sup>th</sup> 1915 Total No. of visits 9

Sept. 16, 1916

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. The donkey boiler has been built under special survey, in accordance with the approved plans; the workmanship and materials are good and under the vessel eligible for the second class.

D. B. 180 lbs 15"

Survey Fee ... £ ... : When applied for, ... 19

Travelling Expenses (if any) £ ... : When received, ... 19

Committee's Minute FRI. 20 OCT. 1916

Assigned See S. Rpt attached

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

W373-0143

Lloyd's Register Foundation