

# REPORT ON BOILERS.

L.An.Blr.Rpt.  
No. L.A.51

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Port of LOS ANGELES, CALIFORNIA

Survey held at LOS ANGELES, CALIFORNIA Date, First Survey 10th April Last Survey 29th April 1942  
 on the BRITISH GOVERNMENT FREIGHTERS <sup>3/5</sup> "Ocean Verity" (Number of Visits 15) Tons {Gross 7174 Net 4272  
 at Richmond, Calif. By whom built Todd-California Shipbuilding Yard No. 24 When built 1942  
 Division of the Permanente Metals Corp.  
 es made at Hamilton, Ohio. By whom made General Machinery Engine No. 6719 When made 1942  
 Corp.  
 s made at Los Angeles, Calif. By whom made Western Pipe & Steel Co. Boiler No. 51 L.A. When made 1942  
 net holes an  
 nal Horse Power 505 Owners British Government Port belonging to London.

## WATER TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Lukens Steel Co., Bethlehem Steel Co., Taylor Pipe & Forge Works (Letter for Record S)  
 Heating Surface of Boilers (1) 2380 sq.ft. Is forced draught fitted Yes Coal or Oil fired Yes  
 and Description of Boilers one (1) Scotch Type Working Pressure 220 lbs.  
 by hydraulic pressure to 380 lbs. Date of test 29th Apr. '42 No. of Certificate 51 L.A. Can each boiler be worked separately  
 of Firegrate in each boiler 43 sq.ft. No. and Description of Safety valves to each boiler  
 each set of valves per boiler {per Rule as fitted Pressure to which they are adjusted Are they fitted with easing gear  
 of donkey boilers, state whether steam from main boilers can enter the donkey boiler  
 distance between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers  
 distance between shell of boiler and tank top plating Is the bottom of the boiler insulated  
 internal diameter of boilers 14' 6<sup>3</sup>/<sub>16</sub>" Length 11' 6<sup>15</sup>/<sub>16</sub>" Shell plates: Material Steel Tensile strength 65000/75000  
 1' 13<sup>3</sup>/<sub>32</sub>" Are the shell plates welded or flanged No Description of riveting: circ. seams {end Double zigzag inter. ---  
 T.R.D.B.B.S. Diameter of rivet holes in {circ. seams 1<sup>1</sup>/<sub>2</sub>" Pitch of rivets {4.25" long. seams 1<sup>1</sup>/<sub>2</sub>" 10"  
 of strength of circ. end seams {plate 64.7 rivets 47 Percentage of strength of circ. intermediate seam {plate None fitted rivets None fitted  
 and the of strength of longitudinal joint {plate 85.0 rivets 93.4 combined 88.8  
 of butt straps {outer 1<sup>3</sup>/<sub>32</sub>" inner 1<sup>7</sup>/<sub>32</sub>" No. and Description of Furnaces in each Boiler Three (3) Morrison Type  
 Steel Tensile strength 58000/68000 Smallest outside diameter 3' 5<sup>9</sup>/<sub>16</sub>"  
 plain part {top 9<sup>3</sup>/<sub>16</sub>" Thickness of plates {crown 21<sup>3</sup>/<sub>32</sub> Description of longitudinal joint Welded bottom 9<sup>3</sup>/<sub>16</sub>" bottom 21<sup>3</sup>/<sub>32</sub>"  
 of stiffening rings on furnace or c.c. bottom None fitted  
 es in steam space: Material Steel Tensile strength 58000/68000 Thickness 1<sup>1</sup>/<sub>32</sub>" RD 1<sup>1</sup>/<sub>32</sub>" Pitch of stays 21<sup>1</sup>/<sub>4</sub>" x 21"  
 stays secured Double Nuts  
 es: Material {front Steel Tensile strength 58000/68000 Thickness {1<sup>1</sup>/<sub>32</sub>" F back Steel 58000/68000 1<sup>3</sup>/<sub>16</sub>" B  
 b of stay tubes in nests 9<sup>7</sup>/<sub>16</sub>" 9.7 Pitch across wide water spaces 14<sup>1</sup>/<sub>2</sub>" x 8<sup>1</sup>/<sub>4</sub>"  
 o combustion chamber tops: Material Steel Tensile strength 65000/75000 Depth and Thickness of girder  
 10<sup>1</sup>/<sub>4</sub>" - 2x 7<sup>7</sup>/<sub>8</sub>" Length as per Rule 2' 10" Distance apart 11" No. and pitch of stays  
 3" x 7<sup>5</sup>/<sub>8</sub>"  
 ngth 58000/68000 Thickness: Sides 25<sup>3</sup>/<sub>32</sub>" Back 23<sup>3</sup>/<sub>32</sub>" Top 25<sup>3</sup>/<sub>32</sub>" Bottom 25<sup>3</sup>/<sub>32</sub>"  
 ays to ditto: Sides 9" x 10<sup>7</sup>/<sub>32</sub>" Back 9" x 9" Top 11" x 7<sup>5</sup>/<sub>8</sub>" Are stays fitted with nuts or riveted over Nuts  
 te at bottom: Material Steel Tensile strength 58000/68000 Thickness 1<sup>1</sup>/<sub>32</sub>"  
 Lower back plate: Material Steel Tensile strength 58000/68000 Thickness 1<sup>1</sup>/<sub>32</sub>"  
 ays at wide water space 15" x 9" Are stays fitted with nuts or riveted over Nuts  
 es: Material Steel Tensile strength 65000/75000  
 At body of stay, 3<sup>1</sup>/<sub>2</sub>" No. of threads per inch Six (6)  
 Over threads 3<sup>3</sup>/<sub>4</sub>"  
 es: Material Steel Tensile strength 58000/68000  
 At turned off part, 1<sup>7</sup>/<sub>8</sub>" 1<sup>3</sup>/<sub>4</sub>" No. of threads per inch Nine (9)  
 Over threads

Are the stays drilled at the outer ends No Margin stays: Diameter  $\left\{ \begin{array}{l} \text{At turned off part} \\ \text{or} \\ \text{Over threads} \end{array} \right. 2\frac{1}{8}" \quad 2"$

No. of threads per inch Nine (9)

Tubes: Material Steel Sol. Dr. External diameter  $\left\{ \begin{array}{l} \text{Plain} \\ \text{Stay} \end{array} \right. 3" \quad 3"$  Thickness  $\left\{ \begin{array}{l} .165" \\ 3/8" \\ 5/16" \end{array} \right.$  No. of threads per inch Nine (9)

Pitch of tubes 4 1/4" x 4 1/8" Manhole compensation: Size of opening

shell plate Section of compensating ring No. of rivets and diameter of rivet holes

Outer row rivet pitch at ends Depth of flange if manhole flanged Steam Dome: Material

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint  $\left\{ \begin{array}{l} \text{Plata} \\ \text{Rivets} \end{array} \right.$

Internal diameter Thickness of crown No. and diameter of stays

How connected to shell Inner radius of crown

Size of doubling plate under dome Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell

Type of Superheater Manufacturers of  $\left\{ \begin{array}{l} \text{Tubes} \\ \text{Steel forgings} \\ \text{Steel castings} \end{array} \right.$

Number of elements Material of tubes Internal diameter and thickness of tubes

Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler

Area of each safety valve Are the safety valves fitted with easing gear

Pressure to which the safety valves are adjusted Hydraulic test pressure

tubes forgings and castings and after assembly in place Are drain cocks of valves fitted to free the superheater from water where necessary

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes

The foregoing is a correct description,  
 WESTERN PIPE STEEL COMPANY OF CALIFORNIA  
 by A. M. Neelich ASST. SECRETARY Manufacturer

Dates of Survey  $\left\{ \begin{array}{l} \text{During progress of} \\ \text{work in shops - -} \\ \text{while} \\ \text{building} \end{array} \right. \left\{ \begin{array}{l} \text{During erection on} \\ \text{board vessel - - -} \end{array} \right.$  10th April to 29th April, 1942

Are the approved plans of boiler and superheater forwarded herewith Approved  
 (If not state date of approval.) April 28, 1941

Total No. of visits 15

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. L. An. Blr. Rpt. No. 1

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) The Boiler, so far as stated above, has been built under Special Survey in accordance with the Rules and approved plans, and the workmanship and material is good. It has been satisfactorily tested to 380 lbs. per square inch by hydraulic pressure in the presence of the undersigned. It has been forwarded to Richmond, California, to be fitted on board, and when this has been done in accordance with the Rules, the vessel will be eligible, in my opinion, to receive the notation:-

\*LMC with date, and 220 lbs. and F.D. in the Register Book.

Survey Fee ... .. \$ #108. 61 : } When applied for, 19

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

James A. Anderson  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK AUG 26 1942

Assigned See Richmond Rpt. NO. 24.

Rpt. 13.

Date of writing

No. in Survey Reg. Book.

Built at

Owners

Electric Light

Is the Vessel

System of D

Pressure of su

Direct or Alt

If alternating

Has the Autom

Generators, a

are they over co

Where more tha

series with each

approved

Are all terminal

short circuited

Position of G

in way of the

woodwork or oth

are the generato

Earthing, are

in metallic con

a fuse on each

Switchboard

injury and dam

horizontally fro

materials

is it of an appr

non-hygroscopic

type

YES

omnibus bars

"off" position

switches

Are turbine dre

fire-resisting m

voltmeters

do these compl



B10