

REPORT ON BOILERS.

L.An.Blr.Rpt.
No. L.A.50

Received at London Office -8 SEP 1942

Port of LOS ANGELES, CALIFORNIA

Survey held at LOS ANGELES HARBOR, CALIF.

Date, First Survey 10th April Last Survey 29th April 1942

on the 5/5 "Ocean Verity"

(Number of Visits 14) Tons { Gross 7174 Net 4272

Richmond, Calif. By whom built Todd-California Shipbuilding Division Yard No. 24 When built 1942
Hamilton, Ohio. of the Permanente Metals Corporation.

Los Angeles, Calif. By whom made Western Pipe & Steel Co. Engine No. 50 L.A. When made 1942

Los Angeles, Calif. By whom made Western Pipe & Steel Co. Boiler No. 50 L.A. When made 1942

al Horse Power 505 Owners British Government Port belonging to London

LTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Constructors 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 ~~not~~ fired Yes

Description of Boilers one (1) Scotch Type Working Pressure 220 lbs.

Are drained by hydraulic pressure to 380 lbs. Date of test 28th Apr. '42 No. of Certificate 50 L.A. Can each boiler be worked separately

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

Man 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

rewith Apr 28, 1941 internal diameter of boilers 14'6³/₁₆" Length 11'6¹⁵/₁₆" Shell plates: Material Steel Tensile strength 65000/75000
1¹³/₃₂" Are the shell plates welded or flanged No Description of riveting: circ. seams { end Double zigzag inter. ---

T.R.D.B.S. Diameter of rivet holes in { circ. seams 1¹/₂" long. seams 1¹/₂" Pitch of rivets { 4.25" 10" None fitted None fitted

ted above e 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 e of strength of longitudinal joint { plate 85.0 rivets 93.4 combined 88.8

r square of butt straps { outer 1³/₃₂" inner 1⁷/₃₂" No. and Description of Furnaces in each Boiler Three (3) Morrison Type

Richmon Steel Tensile strength 58000/68000 Smallest outside diameter 3'5⁹/₁₆"

e Rules, plain part { top 9³/₁₆" Thickness of plates { crown 21/32 bottom 21/32 Description of longitudinal joint Welded

as of stiffening rings on furnace or c.c. bottom None fitted

es in steam space: Material Steel Tensile strength 58000/68000 Thickness 1¹/₃₂" RD 1¹/₃₂" Pitch of stays 21¹/₄" x 21"

stays secured Double Nuts

ates: Material { front Steel Tensile strength 58000/68000 Thickness 1¹/₃₂" F back Steel Tensile strength 58000/68000 Thickness 1³/₁₆" B

h of stay tubes in nests 9⁷/₁₆" 9.7 Pitch across wide water spaces 14¹/₂" x 8¹/₄"

o combustion chamber tops: Material Steel Tensile strength 65000/75000 Depth and Thickness of girder

0¹/₄"-2x⁷/₈" Length as per Rule 2'10" Distance apart 11" No. and pitch of stays

3 x 7⁵/₈" Combustion chamber plates: Material Steel Tensile strength 58000/68000 Thickness: Sides 25/32 Back 23/32 Top 25/32 Bottom 25/32

ays to ditto: Sides 9"x10⁷/₃₂" Back 9" x 9" Top 11" x 7⁵/₈" Are stays fitted with nuts or riveted over Nuts

te at bottom: Material Steel Tensile strength 58000/68000

1¹/₃₂" Lower back plate: Material Steel Tensile strength 58000/68000 Thickness 1¹/₃₂"

ays at wide water space 15" x 9" Are stays fitted with nuts or riveted over Nuts

s Register of: Material Steel Tensile strength 65000/75000

At body of stay, 3¹/₂" No. of threads per inch Six (6)
or 3³/₄"

Over threads: Material Steel Tensile strength 58000/68000

At turned off part, 1⁷/₈" 1³/₄" No. of threads per inch Nine (9)
or Over threads

Are the stays drilled at the outer ends. No Margin stays: Diameter { At turned off part, 2 1/8" or 2" Over threads. 2 1/8" 2"

No. of threads per inch Nine (9)

Tubes: Material Steel Sol. Dr. External diameter { Plain 3" Stay 3" Thickness { .165" 3/8" 5/16" No. of threads per inch Nine

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 { Plate Rivets

Internal diameter Thickness of crown No. and diameter of rivet holes

stays Inner radius of crown Diameter of rivet holes

How connected to shell Size of doubling plate under dome

of rivets in outer row in dome connection to shell

Type of Superheater Manufacturers of { Tubes Steel forgings Steel castings

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

Material of headers Tensile strength Thickness Can the superheater be shut off from the boiler

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 drains

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 J. Amelick ASST. SECRETARY

Dates of Survey { During progress of work in shops - - } 10th April to 29th April, 1942 Are the approved plans of boiler and superheater forwarded herewith Yes
while building { During erection on board vessel - - - } April 28, 1941 (If not state date of approval.)
Total No. of visits 14

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.