

REC'D NEW YORK Aug. 9-1918.

Rpt. 5.

# REPORT ON BOILERS.

No. 94

1624

Completed Aug. 2nd. 1918. When handed in at Local Office July 2nd. 1918. Port of CLEVELAND, OHIO and New Orleans

No. in Survey held at Buffalo, N.Y. and New Orleans Date, First Survey Jan'y 15th 1917 East Survey June 15th 1917

Reg. Book. on the T.S.S. "MEXOIL" (Number of Visits) } Gross 1370 }  
 Tons } Net 760.

Master J.W. Mein Built at Vinit, La. By whom built The Petroleum Transport Co. When built 1918-2

Engines made at Ridgway, Pa. By whom made Ridgway Dynamot Eng. Co. When made 1917.

Boilers made at Buffalo, N.Y. By whom made The Lake Erie Boiler Works When made 1914

Registered Horse Power 820 Owner The Petroleum Transport Co Port belonging to Los Angeles, Cal.

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Lukens Iron & Steel Co

Letter for record (a) Total Heating Surface of Boilers 1854 Is forced draft fitted No. and Description of Boilers Two Scotch 2 S.B. Working Pressure 190 lbs Tested by hydraulic pressure to 300 lbs Date of test 14-6-14

No. of Certificate 85 Can each boiler be worked separately Yes Area of fire grate in each boiler Oil burning and Description of safety valves to each boiler 2 Spring loaded. Area of each valve 7.06 sq. in. Pressure to which they are adjusted 190 lbs.

Are they fitted with easing gear Yes. In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No P.B.

Smallest distance between boilers or uptakes and bunkers or woodwork 23" Mean dia. of boilers 9'-6" Length 10'-0"

Material of shell plates O.H. Steel Thickness 59/64 Range of tensile strength 71680 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Lap Single Riveting. seams Butt double strap Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 7 1/2"

Lap of plates or width of butt straps 16 3/4" Per centages of strength of longitudinal joint rivets 119 Working pressure of shell by rules 197 plate 84.16

Size of manhole in shell 11 X 15 Size of compensating ring 30 1/2 X 34 1/2 No. and Description of Furnaces in each boiler 2 Horroons Material O.H. Steel Outside diameter 42 1/8" Length of plain part 7" Thickness of plates crown 17/32 bottom 17/32

Description of longitudinal joint No. of strengthening rings Working pressure of furnace by the rules 194 Combustion chamber plates: Material O.H. Steel Thickness: Sides 39/64 Back 39/64 Top 5/8 Bottom 39/64 Pitch of stays to ditto: Sides 7"x7" Back 7"x7"

Top 6 7/8 X 7 1/2 If stays are fitted with nuts or riveted heads Rivetted Working pressure by rules 210 Material of stays Iron Diameter at smallest part 1 3/4" Area supported by each stay 49 sq. in. Working pressure by rules 210 End plates in steam space: Material O.H. Steel Thickness 3/4 9/8

Pitch of stays 15 X 15 How are stays secured Double nuts Working pressure by rules 197 Material of stays Iron Diameter at smallest part 2 3/4

Area supported by each stay 225 sq. in. Working pressure by rules 197 Material of Front plates at bottom O.H. Steel Thickness 3/4" Material of Lower back plate O.H. Steel Thickness 3/4" Greatest pitch of stays 7 X 7 11 3/4 X 7 Working pressure of plate by rules 293 Diameter of tubes 2 1/2"

Pitch of tubes 3 1/2 X 3 1/2 Material of tube plates O.H. Steel thickness: Front 3/4" Back 21/32 Mean pitch of stays 8 3/4" Pitch across wide water spaces 12 1/2" Working pressures by rules 262 Girders to Chamber tops: Material O.H. Steel Depth and thickness of girder at centre 8 1/2" 2 X 5/8 Length as per rule 28 5/16 27" Distance apart 7 1/2" Number and pitch of Stays in each 3 - 6 7/8

Working pressure by rules 236 Superheater or Steam chest; how connected to boiler in smoke box 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 Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater 1.76 sq. in. Are they fitted with easing gear Yes.

## VERTICAL DONKEY BOILER— No. Description Manufacturers of steel

Made at By whom made When made Where fixed Working pressure

tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler

Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength

Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates

Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace

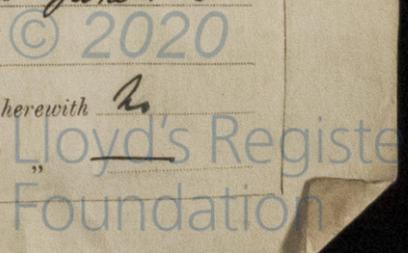
Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown plates

Radius of do. Stayed by Diameter of uptake Thickness of uptake plates

Thickness of water tubes

The foregoing is a correct description,  
 LAKE ERIE BOILER WORKS.  
 L. W. Wheaton, Mgr. Manufacturer.

Dates of Survey while building { During progress of work in shops - Jan'y 15-25-29. Feby 7-14-26-28. Mar 5-7-10-17. Apr 9-13-20. May 7-18-22. June 14-15 }  
 { During erection on board vessel - Mar 5-11-19-28. Apr. 9-12-23-29. May 4-11-17-24. June 26- July 9. }  
 Total No. of visits 19 while body. 13 while fitting on bed. Is the approved plan of main boiler forwarded herewith No



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

In my opinion the workmanship and material employed in the construction of these two boilers are good and sound.

The boilers have been fitted on board and secured in place to stools by strong stretching screws. All mountings and steam and feed pipes tested by hydraulic pressure to 285 lbs. per sq. inch & found tight and sound. They are fitted for oil burning, and have been examined under steam and found good.  
Main steam pipe tested to 570 lbs.

JMB.

Certificate (if required) to be sent to

The amount of Entry Fee .. £	:	:	When applied for,
1/3 Special .. .. .	37.50	:	Sept. 21 <sup>st</sup> 1917
Donkey Boiler Fee .. .. £	:	:	When received,
Travelling Expenses (if any) \$	10.00	:	Oct. 23 1917

J. W. Furdell - Buffalo  
J. Buchanan  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute New York AUG 13 1918  
Assigned See No. Rpt 1624

