

# REPORT ON BOILERS.

Received at London Office **MON. OCT. 14. 1918**  
 Date of writing Report (24. 5. 1918) **REC'D NEW YORK Sept. 9-1918** When handed in at Local Office 191  
 Port of **Cherbourg**  
 No. in Survey held at **Buffalo N.Y.** Date, First Survey **May 1<sup>st</sup> 1918** Last Survey **June 13<sup>th</sup> 1918**  
 Reg. Book. on the **Main Boilers for S.S. LAKE PLEASANT** (Number of Visits) (191) (Gross Tons) (Net Tons)  
 Master **Arthur O.** Built at **Ashtabula, O.** By whom built **The St. Lake Eng. Works** When built **1918**  
 Engines made at **Ashtabula, O.** By whom made **The St. Lake Eng. Works** When made **1918**  
 Boilers made at **Buffalo N.Y.** By whom made **The Lake Erie Boiler Works** When made **1918**  
 Registered Horse Power **✓** Owners **U.S. Ship. Bond Company** Port belonging to **Ashtabula**

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **Carnegie Steel Co.**

(Letter for record **S**) Total Heating Surface of Boilers **11962** Is forced draft fitted **No** No. and Description of Boilers **2 Scotch Marine** Working Pressure **190** Tested by hydraulic pressure to **300#** Date of test **13-6-18**  
 No. of Certificate **128** Can each boiler be worked separately **Yes** Area of fire grate in each boiler **74.7 sq** No. and Description of safety valves to each boiler **Two Spring** Area of each valve **12.57 sq** Pressure to which they are adjusted **164 lb**  
 Are they fitted with easing gear **Yes** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **✓**  
 Smallest distance between boilers or uptakes and bunkers on woodwork **8 1/2"** Mean dia. of boilers **15'9"** Length **11'0"**  
 Material of shell plates **C.A. Steel** Thickness **1 1/2"** Range of tensile strength **62700 / 71680** Are the shell plates welded or flanged **No**  
 Descrip. of riveting: cir. seams **Lap Single R. long. seams B. D. S.** Diameter of rivet holes in long. seams **1 5/16"** Pitch of rivets **8 1/8"**  
 Lap of plates or width of butt straps **19 3/4"** Per centages of strength of longitudinal joint rivets **88.1** plate **83.84** Working pressure of shell by rules **200#** Size of manhole in shell **12" x 16"** Size of compensating ring **2'9" x 2'9" x 1 1/8"** No. and Description of Furnaces in each boiler **3 Morrison** Material **C.A. Steel** Outside diameter **47 1/4"** Length of plain part **4 5/8"** Thickness of plates crown **5/8"** bottom **5/8"**  
 Description of longitudinal joint **Weld** No. of strengthening rings **—** Working pressure of furnace by the rules **200.4#** Combustion chamber plates: Material **C.A. Steel** Thickness: Sides **5/8"** Back **5/8"** Top **5/8"** Bottom **3/4"** Pitch of stays to ditto: Sides **7 1/8" x 7 1/8"** Back **7 1/8" x 7 1/8"** Top **7 1/8" x 8 1/8"** If stays are fitted with nuts or riveted heads **others riveted** Working pressure by rules **198#** Material of stays **C.A. Steel** Diameter at smallest part **1.266"** Area supported by each stay **50.76"** Working pressure by rules **198** End plates in steam space: Material **C.A. Steel** Thickness **1 1/2"**  
 Pitch of stays **16 1/2" x 17"** How are stays secured **Double nut** Working pressure by rules **203#** Material of stays **C.A. Steel** Diameter at smallest part **2 3/8"**  
 Area supported by each stay **276.45"** Working pressure by rules **203#** Material of Front plates at bottom **C.A. Steel** Thickness **3/4"** Material of Lower back plate **C.A. Steel** Thickness **2 1/2"** Greatest pitch of stays **7 1/8" x 7 1/8"** Working pressure of plate by rules **219#** Diameter of tubes **3 1/4"**  
 Pitch of tubes **4 1/4" x 4 1/2"** Material of tube plates **C.A. Steel** Thickness: Front **3/4" x 1 1/2"** Back **3/4"** Mean pitch of stays **8 1/2" x 9"** Pitch across wide water spaces **13 1/4"** Working pressures by rules **215.6#** Girders to Chamber tops: Material **C.A. Steel** Depth and thickness of girder at centre **8 3/8" x 9 1/4" x 2"** Length as per rule **2'7 1/2"** Distance apart **8 1/8"** 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 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

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

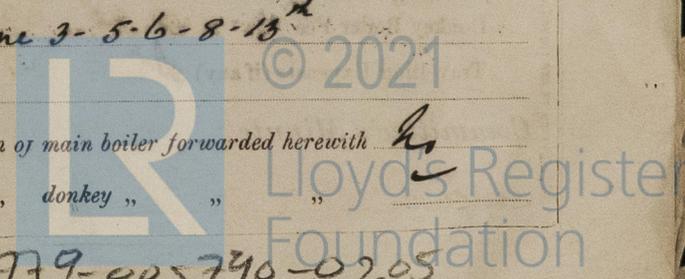
Made at By whom made When made Where fixed Working pressure  
 tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves  
 No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can 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 Plates 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.**  
 By **L. M. Weston** Mer. Manufacturer.

Dates of Survey while building: During progress of work in shops -- **May 1<sup>st</sup> - 2 - 7 - 8 - 9 - 14 - 18 - 20 - 25 - 28<sup>th</sup> June 3 - 5 - 6 - 8 - 13<sup>th</sup>**  
 During erection on board vessel --- **31 July & 24 Aug 1918.**  
 Total No. of visits **19**

Is the approved plan of main boiler forwarded herewith **h**  
 " " " donkey " " " "

005779-005790-0205  
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REPORT ON BOILERS

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

These boilers have been built under special survey:-  
The materials and workmanship employed in their construction are sound and good, and proved satisfactory under test.  
They have been forwarded to the Great Lakes Engineering Co. Ashtabula to be fitted on board Hull No 191.

These Boilers have been satisfactorily fitted on the above Vessel

M. Lane  
Cleveland, O.  
24 Aug 1918.

Certificates (if required) to be sent to  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee	.. £	:	When applied for,
Special	.. £	:	.....19.....
Donkey Boiler Fee	.. £	:	When received,
Travelling Expenses (if any)	.. £	:	.....19.....

Committee's Minute New York SEP 24 1918  
Assigned See Clr Rpt 183

