

## REPORT ON WATER TUBE BOILERS.

WED APR 5 1920

Received at London Office

t. 5c.

of writing Report 30 June 1919 When handed in at Local Office

191

Port of BUFFALO N.Y.

To. in Survey held at BUFFALO N.Y. Date, First Survey MARCH 25<sup>th</sup> 1919 Last Survey 29<sup>th</sup> May 1920  
 g. Bk. on the City of Joliet hull # 1448 Number of Visits 31 Tons { Gross 6527  
 ster William Logan Built at WILMINGTON NC By whom built CAROLINA S.B. Co. When built 1920-5  
 gines made at Hamilton, Ohio By whom made Hoover Owens & Rentschler Co. When made 1919  
 ilers made at BUFFALO N.Y. By whom made BARBER ASPHALT PAVING CO. When made 1919  
 gistered Horse Power 590 Owners U.S. Shipping Board Port belonging to Wilmington

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel MIDVALE STEEL CO PHILADELPHIA PA.  
 ter for Record S Date of Approval of plan SEP 6<sup>th</sup> 1918 Number and Description or Type

Boilers 3 FOSTER WATER TUBE Working Pressure 225 LBS Tested by Hydraulic Pressure to 450 LBS Date of Test 27-6-19  
 of Certificate 160 Can each boiler be worked separately YES Total Heating Surface of Boilers 9150

of draught fitted Yes Area of fire grate (coal) in each Boiler 75 Total grate area of boilers in vessel including  
 n and Auxiliary No. and type of burners (oil) in each boiler 4 Salt type No. and description of safety valves on

boiler 2 Spring loaded Area of each valve 9.424 Pressure to which they are adjusted 200 lbs  
 they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler ✓

allest distance between boilers or uptakes and bunkers or woodwork 8" Height of Boiler 15' 9 3/4" Width and Length 13' 2" x 14' 3"  
 am Drums:—Number in each boiler ONE Inside diameter 42" Material of plates O.H. STEEL Thickness 3/4"

age of Tensile Strength 60000 to 71680 LBS Are drum shell plates welded or flanged NO Description of riveting:—  
 seams SINGLE long. seams TREBLE Diameter of rivet holes in long. seams 15/16" Pitch of Rivets 7 3/4"

p of plate or width of butt straps OUT. 14 1/4" Thickness of straps 9/16" Percentage strength of long. joint:—Plate 70.8 Rivet 60.9  
 ameter of tube holes in drum 3 1/2" Pitch of tube holes 7 3/4" Percentage strength of shell in way of tubes 66.9

Drum has a flat side state method of staying NO FLAT SIDES Depth and thickness of girders at centre  
 fitted) Distance apart ✓ Number and pitch of stays in each ✓ Working pressure

rules ✓ Steam Drum Heads or Ends:—Material O.H. STEEL Thickness 3/4" Radius or how stayed 42" RAD.  
 ze of Manhole or Handhole 11" x 15" Water Drums:—Number in each boiler NONE Inside Diameter ✓

aterial of plates ✓ Thickness ✓ Range of tensile strength ✓ Are drum shell plates welded  
 flanged ✓ Description of riveting:—Cir. seams ✓ long. seams ✓ Diameter of Rivet Holes in

g. seams ✓ Pitch of rivets ✓ Lap of plates or width of butt straps ✓ Thickness of straps ✓  
 percentage strength of long. joint:—Plate ✓ Rivet ✓ Diameter of tube holes in drum ✓ Pitch of tube holes ✓

percentage strength of drum shell in way of tubes ✓ Water Drum Heads or Ends:—Material ✓ Thickness ✓  
 dius or how stayed ✓ Size of manhole or handhole ✓ Headers or Sections:—Number TWO

aterial O.H.S. Thickness 3/4" Tested by Hydraulic Pressure to 450 LBS Material of Stays IRON  
 rea at smallest part 1.632" Area supported by each stay 50.24" Working Pressure by Rules 243.6 LBS. Tubes:—Diameter 3"

ickness (10 B.W.G.) 1/34" Number 489 Steam Dome or Collector:—Description of Joint to Shell NONE  
 percentage strength of Joint ✓ Diameter ✓ Thickness of shell plates ✓ Material ✓

escription of longitudinal joint ✓ Diameter of Rivet Holes ✓ Pitch of Rivets ✓ Working Pressure of shell  
 Rules ✓ Crown or End Plates:—Material ✓ Thickness ✓ How stayed ✓

PERHEATER. Type ✓ Date of Approval of Plan ✓ Tested by Hydraulic Pressure to ✓  
 ate of Test ✓ Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler ✓

diameter of Safety Valve ✓ Pressure to which each is adjusted ✓ Is easing gear fitted ✓  
 a drain cock or valve fitted at lowest point of superheater ✓ Number, diameter, and thickness of tubes ✓

pare Gear. Tubes ✓ Gaskets or joints:—Manhole ✓ Handhole ✓ Handhole plates ✓

The foregoing is a correct description  
 The Barber Asphalt Paving Co. Engineers  
 Albert T. Clay for Manager

(16 VISITS)

RETAINED FOR  
DUPLICATE  
BOILERS.

Dates } During progress of work in shops - - } MAR. 25. 26. Apr. 2. 16-19. 24. 28 MAY 1. 12. 17. 21. 27. JUNE 5. 11. 25. 27 Is the approved plan of boiler forwarded herewith ✓  
 Survey } while } During erection on } Jan. 29. Feb. 4. 17. Mar. 5. 17. 29. Apr. 13. 15. 17. 28 Total No. of visits 31  
 while } board vessel - - - } May 5. 11. 14. 25. 29.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed

nder Special Survey:—The material and workmanship are sound and good:—

he headers with tubes assembled and steam drums were tested separately:—Boilers to be

assembled and final hydrostatic test made to complete Survey:—The Boilers have been properly fitted

on board and on completion tested under steam. Safety valves have been adjusted to 200 lbs. H.P.

Survey Fee Buffalo: \$82.50 : : : When applied for, 191

Travelling Expenses (if any) £ : : : When received, 30/ 7/24/1920

Assigned See Wilm. Rpt No. 98 G. H. Osborn. Geo. Allan  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York JUL 13 1920

Lloyd's Register

FW1412-0051