

pt. 5c.

REPORT ON WATER TUBE BOILERS.

No. 49.

Received at London Office

WED. MAY. 19-1920

Date of writing Report JUNE 18TH 1919. When handed in at Local Office

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Port of BUFFALO N.Y.

No. in Survey held at Wilmington N.C. Date, First Survey MARCH 17TH 1919 Last Survey March 13TH 1920

Reg. Bk. on the Steel screw Steamer "City of Omaha"

Number of Visits 32 Tons Gross 6527 Net 4049

Master S. Matthews. Built at Wilmington N.C. By whom built George A. Fuller C.

When built 1920.3

Engines made at Hamilton, Ohio By whom made Hoover Owens & Reutcher C.

When made 1919

Boilers made at BUFFALO N.Y. By whom made BARBER ASPHALT PAVING CO.

When made 1919

Registered Horse Power 590 Owners United States Shipping Board Port belonging to Wilmington N.C.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel MIDVALE STEEL CO. PHILADELPHIA, PA.

Letter for Record S. Date of Approval of plan SEP. 6TH 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 11-6-19.

No. of Certificate 158 Can each boiler be worked separately YES Total Heating Surface of Boilers 9150 sq. ft.

Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 75 sq. ft. Total grate area of boilers in vessel including

Main and Auxiliary 36450 sq. ft. No. and type of burners (oil) in each boiler 4. Dahl type No. and description of safety valves on

each boiler 3. Spring loaded Area of each valve 9.424 Pressure to which they are adjusted 200 lbs.

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 or woodwork 8" Height of Boiler 15' 9 3/4" Width and Length 13' 2" - 14' 3"

Steam Drums:—Number in each boiler ONE Inside diameter 42" Material of plates O.H. STEEL Thickness 3/4"

Range of Tensile Strength 60000 TO 71680 LBS Are drum shell plates welded or flanged NO Description of riveting:—

Cir. seams SINGLE long, seams TREBLE Diameter of rivet holes in long, seams 15/16" Pitch of Rivets 7 3/4"

Lap 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

Diameter of tube holes in drum 3 3/32" Pitch of tube holes 7 3/4" Percentage strength of shell in way of tubes 66.9

If Drum has a flat side state method of staying NO FLAT SIDES Depth and thickness of girders at centre

if fitted Distance apart Number and pitch of stays in each Working pressure

by rules Steam Drum Heads or Ends:—Material O.H. STEEL Thickness 3/4" Radius or how stayed 42" RAD.

Size of Manhole or Handhole 11" x 15" Water Drums:—Number in each boiler NONE Inside Diameter

Material of plates Thickness Range of tensile strength Are drum shell plates welded

on Do. or flanged Description of riveting:—Cir. seams long, seams Diameter of Rivet Holes in

on Do. 180 W.J.F. long, 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

Radius or how stayed Size of manhole or handhole Headers or Sections:—Number TWO

Material O.H. STEEL Thickness 3/4" Tested by Hydraulic Pressure to 450 LBS. Material of Stays IRON

Area at smallest part 158" DIA 3/4" BORE Area supported by each stay 50.24 Working Pressure by Rules 243.6 LBS Tubes:—Diameter 3"

Thickness (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

Description of longitudinal joint Diameter of Rivet Holes Pitch of Rivets Working Pressure of shell

by Rules Crown or End Plates:—Material Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date 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

Is a drain cock or valve fitted at lowest point of superheater Number, diameter, and thickness of tubes

Spare 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

RETAINED FOR DUPLICATE BLRS

Dates During progress of work in shops -- MAR. 17. 21. 25. 26 APRIL 2. 5. 19. 24. 28 MAY 1. 12. 17. 21. 28 JUN 5. 11. Is the approved plan of boiler forwarded herewith
while During erection on board vessel -- NOV. 1919. 22. 26 DEC. 1. 9. 17. 23. 30 1920. JAN. 9. 15 Total No. of visits 32
building 20. 27. Feb. 5. 10. 19. Mar. 3. 13.

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

special Survey:—The material and workmanship are sound and good:—The 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 tried

under steam and found satisfactory. The safety valves have been adjusted to 200 lbs per sq. inch

Survey Fee CREDIT BUFFALO \$82.50. When applied for, 191

Travelling Expenses (if any) £ When received, 7/5/20 1916/20

Committee's Minute New York MAY 4 1920

Assigned All Wilm 93

S. H. Osborn Geo. Allan
Engineer Surveyor to Lloyd's Register of Shipping.