

# REPORT ON WATER TUBE BOILERS.

No. 3551

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Survey held at **Bayonne, N. J.** Date, First Survey \_\_\_\_\_ Last Survey **April 23 1919.**  
 on the **S S "Andrew Jackson"** Number of Visits **32** Tons } Gross **8289**  
 Built at **Gloucester** By whom built **Pusey Jones Co** Net **6176**  
 When made **1919**  
 By whom made **General Electric Company** When made **1918**  
 By whom made **Babcock & Wilcox Co.** When made **1919**  
 Owners **U. S. Shipping Board** Port belonging to **Gloucester City**

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel **Midvale Steel Co.**

Date of Approval of plan **July 18, 1917.** Number and Description or Type  
 of Certificate **369** Working Pressure **200 lbs.** Tested by Hydraulic Pressure to **400 lbs.** Date of Test **11-9-19**

Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **8706 sq. ft.**  
 Area of fire grate (coal) in each Boiler **87.5** Total grate area of boilers in vessel including  
 and Auxiliary **525** No. and type of burners (oil) in each boiler **Five** No. and description of safety valves on  
 boiler **double spring loaded** Area of each valve **7.06 sq. in.** Pressure to which they are adjusted **210 lbs.**

In case of donkey boilers state whether steam from main boilers can enter the donkey boiler **Yes**  
 Height of Boiler **12'10"** Width and Length **14'7 3/8, 11'7 1/8**

Number in each boiler **one** Inside diameter **42"** Material of plates **Steel** Thickness **1/2"**  
 of Tensile Strength **55000 - 65000 lbs.** Are drum shell plates welded or flanged **No** Description of riveting:—  
 seams **S.R. lap** long. seams **D.R.D.B.S.** Diameter of rivet holes in long. seams **29/32"** Pitch of Rivets **2 9/32" & 4 9/16" 9-**

Thickness of straps **9/16"** Percentage strength of long. joint:—Plate **80.1** Rivet **108**  
 Pitch of tube holes **7"** Percentage strength of shell in way of tubes **84.8**

Water Drum Heads or Ends:—Material **Steel** Thickness **19/32"** Radius or how stayed **42"**  
 of Manhole or Handhole **15" x 11"** Water Drums:—Number in each boiler \_\_\_\_\_ Inside Diameter \_\_\_\_\_

Material of plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are drum shell plates welded \_\_\_\_\_  
 Description of riveting:—Cir. seams \_\_\_\_\_ long. seams \_\_\_\_\_ Diameter of Rivet Holes in \_\_\_\_\_

Pitch of rivets \_\_\_\_\_ Lap of plates or width of butt straps \_\_\_\_\_ Thickness of straps \_\_\_\_\_  
 Diameter of tube holes in drum \_\_\_\_\_ Pitch of tube holes \_\_\_\_\_

Water Drum Heads or Ends:—Material \_\_\_\_\_ Thickness \_\_\_\_\_  
 Headers or Sections:—Number **24**

Material **Steel** Thickness **9/16"** Tested by Hydraulic Pressure to **500 lbs.** Material of Stays \_\_\_\_\_  
 Area supported by each stay \_\_\_\_\_ Working Pressure by Rules **289 lbs.** Tubes:—Diameter **4"**

Number **240** Steam Dome or Collector:—Description of Joint to Shell \_\_\_\_\_  
 Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_

Crown or End Plates:—Material \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_  
 Type **Foster** Date of Approval of Plan **Plan in New York** Tested by Hydraulic Pressure to **600 lbs.**

Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler **Yes**  
 Pressure to which each is adjusted **210 lbs.** Is easing gear fitted **Yes**

Number, diameter, and thickness of tubes \_\_\_\_\_  
 Gaskets or joints:—Manhole \_\_\_\_\_ Handhole \_\_\_\_\_ Handhole plates \_\_\_\_\_

The foregoing is a correct description,  
**The Babcock & Wilcox Co** Manufacturer.  
**On Woodland Marine Dept.**

During progress of survey 1919 Feb. 16, 17, 18, 19 & daily  
 work in shops - - - until 23rd April, 1919 Is the approved plan of boiler forwarded herewith  
 During erection on board vessel - - - Total No. of visits \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **The workmanship and material  
 both of good quality. To complete the survey, the boilers to be reerected on board, and tested  
 hydraulic pressure. All mountings to be examined and fitted. Safety valves to be adjusted under**

**Boilers now erected on board mountings examined and fitted  
 and Safety Valves adjusted to 210 lbs**

Survey Fee ... £ : : When applied for, 191  
 Travelling Expenses (if any) £ : : When received, 191  
 (Signed) **A. MACWATT** J. Adams  
 Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute  
 signed **See Phil Rpt 3551**

