

# REPORT ON WATER TUBE BOILERS.

No. 1382

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Report 19 When handed in at Local Office 19  
 Survey held at Barberton, Ohio Date, First Survey April 9 Last Survey June 29, 1949  
 on the Tanker - Hull 574 - Two Main W.T. Boilers S.S. Sovac Comet (Number of Visits 8) Gross -  
 Tons -  
 Co. Net -  
Chester, Pennsylvania By whom built Sun Shipbuilding and Dry Dock When built -  
 By whom made - When made -  
Barberton, Ohio By whom made Babcock & Wilcox Co. When made 1949  
 Owners - Port belonging to -

**WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.**—Manufacturers of Steel Worth Steel Co.  
 Approval of plan Dec. 28, 1948 Feb. 2, 1949 Number and Description or Type  
2 Marine (2) Drum Type Working Pressure 685 psi Tested by Hydraulic Pressure to 1028 psi Date of Test -  
 Can each boiler be worked separately Yes Total Heating Surface of Boilers 2040 sq. ft. each Superheater  
 Area of fire grate (coal) in each Boiler - 7390 " " " Economizer  
 No. and description of safety valves on -  
 Area of each set of valves per boiler { per rule - Pressure to which they -  
 as fitted -  
 Are they fitted with easing gear - In case of donkey boilers state whether steam from main boilers can enter -  
 Smallest distance between boilers or uptakes and bunkers or woodwork - Height of boiler 22'-6"  
 Length 17'-2" Steam Drums:—Number in each boiler One Inside diameter 46 27/32"  
 of plates Wrapper 1 3/16" Tube • 3 3/4" Range of Tensile Strength 70,000 minimum Are drum shell plates welded -  
 Welded - If fusion welded, state name of welding firm Babcock and Wilcox Co. Have all the requirements of the rules -  
 Description of riveting:—Cir. seams No Riveting long. seams -  
 Pitch of rivets - Thickness of straps - Percentage strength of -  
 Diameter of tube holes in drum 1 1/4"-2"-3 1/4" Pitch of tube holes 1.75"  
 Rivet - Strength of shell in way of tubes 27 1/4% Steam Drum Heads or Ends:—Range of tensile strength 70,000 Min.  
 Radius or how stayed Radius 6" Size of manhole or handhole 12" x 16" Water Drums:—Number -  
 Inside Diameter 29 5/8" Thickness of plates Wrap 3/4" Range of tensile strength 70,000 Min. Are drum shell plates -  
 flanged Welded If fusion welded, state name of welding firm See above Have all the requirements of the rules -  
 Description of riveting:—Cir. seams - long. seam -  
 Pitch of rivets - Thickness of straps -  
 Diameter of tube holes in drum 1 1/4"-2"-3 1/4" Pitch of tube holes 1.75"  
 Rivet - Strength of drum shell in way of tubes 27 1/4% Water Drum Heads or Ends:—Range of Tensile strength 70,000 Min.  
 Radius or how stayed Radius 3 3/4" Size of manhole or handhole 12" x 16"  
 of plates Manhead 1 3/16" Blankhead 2 Material O.H. Seamless Thickness .875" Tested by Hydraulic Pressure to 1370 psi  
 Number 1 Side 1 Rear 1 Material Carbon Steel Thickness .875" Tested by Hydraulic Pressure to 1370 psi  
 Diameter Generating 1.25" Thickness 11 BWG Number 1422 Steam Dome or Collector:—Description of -  
 Inside diameter 8 BWG Thickness of shell plates - Range of tensile -  
 Description of longitudinal joint - If fusion welded, state name of welding -  
 Have all the requirements of the rules for Class I vessels been complied with yes Diameter of rivet holes -  
 Thickness of straps - Percentage strength of long. joint - Plate - Rivet -  
 Range of tensile strength - Thickness - Radius or how stayed -  
**HEATER. Drums or Headers:**—Number in each boiler 3 Inside Diameter 5 1/4" square  
1.00" Material Carbon steel Range of tensile strength 70,000 Min. Are drum shell plates welded -  
Seamless If fusion welded, state name of welding firm - Have all the requirements of the rules -  
 Description of riveting:—Cir. seams - long. seams -  
 Pitch of rivets - Thickness of straps - Percentage strength of -  
 Diameter of tube holes in drum - Pitch of tube holes - Percentage strength of -  
 in way of tubes .310% Drum Heads or Ends:—Thickness - Range of tensile strength -  
 Size of manhole or handhole 3 3/4" x 3 3/8" Number, diameter, and thickness of tubes 148-1 1/4" x .135"  
 Hydraulic Pressure to - Date of Test - Is a safety valve fitted to each section of the superheater which -  
 cut off from the boiler - No. and description of Safety Valves - Area of each set -  
 Pressure to which they are adjusted - Is easing gear fitted -

Gear. Has the spare gear required by the rules been supplied  
MB 4342 Boilers No. land 2

The foregoing is a correct description,

Manufacturer.

During progress of work in shops - April 7, May 11, 27, June 2, 3, 8, 10, 29, 1949  
 During erection on board vessel - -  
 Is the approved plan of boiler forwarded herewith No  
 Total No. of visits 8

Is a duplicate of a previous case Yes If so, state vessel's name and report No. Sun Hulls 570 - 576

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) The Boiler components consisting of Drums, Superheater, Waterwall and Economizer Headers were built in accordance with approved drawings and Special Survey during construction by Surveyors to this Society. The workmanship is satisfactory throughout and it is recommended that the Boilers become part of the machinery of a classed vessel with the notation in the Register Book of 2 WTB-685 psi SPT.

By Fee £ 65 :00 When applied for 19  
 Selling Expenses (if any) \$ 65 :00 When received 19

Additional fee to be charged -  
 Philadelphia Surveyors.

Committee's Minute

See First Entry Report attached.

Acting Surveyor to Lloyd's Register

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register  
 Foundation

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