

REPORT ON WATER TUBE BOILERS.

No. 1337

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Date of writing Report May 14 19 48 When handed in at Local Office 19 Port of Cleveland, Ohio
 No. in Survey held at Barberton, Ohio Date, First Survey Sept. 23, 1948 Last Survey Nov. 29 19 48
 Reg. Bk. on the Two (2) Marine "D" Type W.T. Boilers for Hull 569 (Number of Visits 9) {Gross Tons {
 Built at Chester, Pennsylvania By whom built Sun Shipbuilding & D.D. Co. When built 1948
 Engines made at -- By whom made -- When made --
 Boilers made at Barberton, Ohio By whom made Babcock and Wilcox Company When made 1948
 Nominal Horse Power -- Owners Gulf Oil Company Port belonging to --

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Lukens Steel Company
 Date of Approval of plan 9-27-48, 9-28-48, 11-4-48 Number and Description or Type
 of Boilers Two (2) Marine 2 Drum "D" Type Working Pressure 965# Tested by Hydraulic Pressure to 1930# Date of Test Nov. 20, 1948
 No. of Certificate -- Can each boiler be worked separately Yes Total Heating Surface of Boilers Waterwalls 285 sq. ft.
 Is forced draught fitted -- Area of fire grate (coal) in each Boiler --
 No. and type of burners (oil) in each boiler -- No. and description of safety valves on
 each boiler -- Area of each set of valves per boiler {per rule -- Pressure to which they
 are adjusted -- as fitted --
 Are they fitted with easing gear -- 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 -- Height of boiler 20'-3-3/4"
 Width and Length 20'-0"x15'-11-7/8" Steam Drums:—Number in each boiler One Inside diameter 47-3/8"
 Thickness of plates Tube 4-3/8" Range of Tensile Strength 70,000 min. Are drum shell plates welded
 or flanged welded If fusion welded, state name of welding firm Babcock and Wilcox Co. Have all the requirements of the rules
 for Class I vessels been complied with Yes Description of riveting:—Cir. seams -- long. seams --
 Diameter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps -- Percentage strength of
 long. joint:—Plate -- Rivet -- Diameter of tube holes in drum 1.275"-2.025" Pitch of tube holes 1-7/8"-3"-4-3/4"-5"
 Percentage strength of shell in way of tubes 32% Steam Drum Heads or Ends:—Range of tensile strength 70,000 min.
 Thickness of plates Blankhd. 1-11/16" Radius Wrapper 2-1/16" Size of manhole or handhole 12" x 16" Water Drums:—Number
 in each boiler One Inside Diameter 30" Thickness of plates Tube 2-3/4" Range of tensile strength 70,000 min. Are drum shell plates
 welded or flanged welded If fusion welded, state name of welding firm Babcock and Wilcox Co. Have all the requirements of the rules
 for Class I vessels been complied with Yes Description of riveting:—Cir. seams -- long. seam --
 Diameter of rivet holes in long. seams -- Pitch of rivets -- 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:—Range of Tensile strength 70,000 min.
 Thickness of plates 1-5/8" - 1-1/16" Radius or how stayed Radius Size of manhole or handhole 12" x 16"
 Headers or Sections:—Number (3) Material Car. Steel Thickness 1" Tested by Hydraulic Pressure to 1930#
 Tubes:—Diameter 2" dia. Thickness .165 Number 63 Steam Dome or Collector:—Description of
 Joint to Shell -- Inside diameter -- Thickness of shell plates -- Range of tensile
 strength -- Description of longitudinal joint -- If fusion welded, state name of welding
 firm -- Have all the requirements of the rules for Class I vessels been complied with -- Diameter of rivet holes --
 Pitch of rivets -- Thickness of straps -- Percentage strength of long. joint -- Plate -- Rivet --
 Crown or End Plates:—Range of tensile strength -- Thickness -- Radius or how stayed --
 SUPERHEATER. ~~XXXXX~~ Headers:—Number in each boiler 4 Inside Diameter 8-3/4"
 Thickness 1-1/4" Material Carbon Steel Range of tensile strength 60,000# Are drum shell plates welded
 or flanged Seamless If fusion welded, state name of welding firm -- Have all the requirements of the rules
 for Class I vessels been complied with Yes Description of riveting:—Cir. seams -- long. seams --
 Diameter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps -- Percentage strength of
 long. joint:—Plate -- Rivet -- Diameter of tube holes in drum header 1.275" Pitch of tube holes 1-7/8" Percentage strength of
 drum shell in way of tubes 32% Drum Heads or Ends:—Thickness 1-1/4" Range of tensile strength 60,000
 Radius or how stayed -- Size of manhole or handhole 3-3/4" x 3-3/8" Number, diameter, and thickness of tubes 182-1-1/4" dia. x .134"
 Tested by Hydraulic Pressure to 1930# Date of Test Oct. 20-48 Is a safety valve fitted to each section of the superheater which
 can be shut off from the boiler -- No. and description of Safety Valves -- Area of each set
 of valves -- Pressure to which they are adjusted -- Is easing gear fitted --

Spare Gear. Has the spare gear required by the rules been supplied

Boilers No. 1 & 2 NB 4333

The foregoing is a correct description,

Manufacturer.

Dates of Survey } During progress of } Sept. 23, 27, Oct. 6, 13, 20,
 while } work in shops -- } Nov. 8, 10, 16, 29, 1948
 building } During erection on }
 board vessel -- }

Is the approved plan of boiler forwarded herewith Yes

Total No. of visits

Is this boiler a duplicate of a previous case

Yes

If so, state vessel's name and report No.

Hull 567 Report Cleveland 1317

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

The steam and water drums, water walls, Superheater
 and economizer headers were built under Special Survey and in accordance with approved plans. All
 boiler parts were hydrostatic tested and welds X-Rayed in accordance with this Society's Rules, and
 workmanship found satisfactory throughout. Upon satisfactory installation, in my opinion, the vessel

Survey Fee £ : : When applied for, 19

Travelling Expenses (if any) \$50.00 When received, 19

Arranged fee to be charged by Philadelphia

Surveyors on completion.

NEW YORK AUG 31 1949

Committee's Minute

Assigned See First Entry Report attachedwill be eligible to receive the notation of
2 WTB (SPT) 965#

R. S. Haagenen.

Engine Surveyor to Lloyd's Register of Shipping

For W. Chas. Clark & Co. Lloyd's Register

Foundation

010355-010361-0238