

REPORT ON WATER TUBE BOILERS.

No. 1028

Received at London Office

Date of writing Report March 12, 1941. When handed in at Local Office

19

Port of Cleveland, Ohio.

No. in Survey held at Barberton, Ohio. Date, First Survey Jan. 20th, Last Survey Feb. 27th, 1941.

Reg. Bk. on the (Bethlehem Steel Company's Hull No. 1489) 3/5" Sinclair Refining Oil Company Tanker (Number of Visits 7) Tons { Gross - Net -

Built at - By whom built - When built -

Engines made at - By whom made - When made -

Boilers made at Barberton, Ohio. By whom made Babcock & Wilcox Co. When made 1941

Nominal Horse Power - Owners (M.B. 1522 1 & 2) Port belonging to -

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

Date of Approval of plan August 1940.

Boilers (2) Water Tube (Single Drum Type) Working Pressure 500# Tested by Hydraulic Pressure to 750 lbs. Number and Description or Type 100B & 750 1B Date of Test Jan. 1941.

No. of Certificate - Can each boiler be worked separately - Total Heating Surface of Boilers -

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 - as fitted - Pressure to which they are adjusted -

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 18'-3-1/4"

Width and Length 10'9 1/2" & 14'8" Steam Drums:—Number in each boiler (1) Inside diameter 42-11/16"

Thickness of plates 25/32" & 1-5/8" Range of Tensile Strength 70,000 to 82,000 lbs. Are drum shell plates welded

flanged Welded If fusion welded, state name of welding firm - Have all the requirements of the rules

Class I vessels been complied with - 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 90% Rivet - Diameter of tube holes in drum 4-1/32" Pitch of tube holes 7"

Percentage strength of shell in way of tubes 42.41 Steam Drum Heads or Ends:—Range of tensile strength

Thickness of plates 1-5/16" Radius or how stayed 33-3/8" Size of manhole or handhole 12" x 16" Water Drums:—Number

each boiler - Inside Diameter - Thickness of plates - Range of tensile strength - Are drum shell plates

welded or flanged - If fusion welded, state name of welding firm - Have all the requirements of the rules

Class I vessels been complied with - 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

Thickness of plates - Radius or how stayed - Size of manhole or handhole -

Ends or Sections:—Number (13) Material Steel Thickness 19/32" Tested by Hydraulic Pressure to 750 lbs.

Diameter 1-1/4" & 2" Thickness .095" & .134" Number 52 - 2" Steam Dome or Collector:—Description of

out to Shell - Inside diameter - Thickness of shell plates - Range of tensile

Length - 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 - Diameter of rivet holes -

Pitch of rivets - Thickness of straps - Percentage strength of long. joint - Plate - Rivet -

Own or End Plates:—Range of tensile strength - Thickness - Radius or how stayed -

UPPER HEATER. Headers:—Number in each boiler (2) Upper & (2) Lower Inside Diameter 5-1/2" Square

Thickness 7/8" Material Steel Range of tensile strength 62,000 to 72,000# Are drum shell plates welded

flanged - If fusion welded, state name of welding firm - Have all the requirements of the rules

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 1-1/4" Pitch of tube holes 1-3/4" Percentage strength of

Drum shell in way of tubes - Drum Heads or Ends:—Thickness - Range of tensile strength -

Radius or how stayed - Size of manhole or handhole - Number, diameter, and thickness of tubes (195) 1 1/2" -.120"

Tested by Hydraulic Pressure to 750# Date of Test Jan. & Feb. 1941. Is a safety valve fitted to each section of the superheater which

be shut off from the boiler - No. and description of Safety Valves - Area of each set

valves - Pressure to which they are adjusted - Is easing gear fitted -

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

The foregoing is a correct description,

Babcock & Wilcox Co. Manufacturer.

Dates { During progress of 1941 Jan. 20, 22, 30. Feb. 5, 11, 17, 27. Survey work in shops - - } while { During erection on board vessel - - }

Is the approved plan of boiler forwarded herewith

Total No. of visits

Is this boiler a duplicate of a previous case

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, etc.) These boilers, unassembled, comprising steam drums and headers for boilers and superheaters, were built to this Society's Special Survey and approved plans, also in conformity with the Regulations of the U.S. Department of Commerce & Bureau of Marine Inspection & Navigation. The workmanship, materials, X Ray examinations, tension bend tests of fusion welded joints and hydraulic tests, were found satisfactory.

Survey Fee \$ 350.00 : When applied for, 3/18/41.

Travelling Expenses (if any) \$ 14.00 : When received, 3/18/41.

Committee's Minute

Signed See N.Y.K. RPT. 41921

NEW YORK

DEC 30 1941

J. P. Prudden
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
Foundation

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