

REPORT ON WATER TUBE BOILERS.

No. 1073

2 JUN 1942

Received at London Office.

Writing Report Oct. 7th, 1941. When handed in at Local Office 19 Port of Cleveland, Ohio.
 Survey held at Barberton, Ohio. Date, First Survey Feb. 17th, Last Survey April 14th, 1941.
 on the Bethlehem Steel Co. Hull 1493 "Sheldon Clark" (Sinclair Refining Oil Co. Tanker) (Number of Visits 10)
 By whom built - When built -
 made at - By whom made - When made -
 made at Barberton, Ohio. By whom made Babcock & Wilcox Co. When made 1941
 Horse Power - Owners - Port belonging to -

WATER TUBE BOILERS—MAIN, ~~AUXILIARY, OR DONKEY~~—Manufacturers of Steel Bethlehem Steel Co.
 Approval of plan September 1940
 Boilers (2) Single Drum Type Working Pressure 500 lbs. Tested by Hydraulic Pressure to 750 lbs. Number and Description or Type 1000 lbs. Date of Test 4/1/41
 Certificate - Can each boiler be worked separately - Total Heating Surface of Boilers -
 draught fitted - Area of fire grate (coal) in each Boiler -
 type of burners (oil) in each boiler - No. and description of safety valves on -
 boiler - 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 -
 key boiler - Smallest distance between boilers or uptakes and bunkers or woodwork - Height of boiler 18' 1-1/4"
 and Length 11' 9 1/2", 14' 1 1/2" Steam Drums:—Number in each boiler One Inside diameter 42-11/16"
 of plates 25/32" & 1-5/8" Range of Tensile Strength 70,000 to 82,000 lbs. Are drum shell plates welded -
 welded - If fusion welded, state name of welding firm Babcock & Wilcox Co. Have all the requirements of the rules -
 ss I vessels been complied with Yes Description of riveting:—Cir. seams - long. seams -
 er of rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of -
 joint:—Plate 90% Rivet - Diameter of tube holes in drum 4-1/32" Pitch of tube holes 7"
 age strength of shell in way of tubes 42.41 Steam Drum Heads or Ends:—Range of tensile strength 65,000 to 77,000 lbs.
 of plates 1-5/16" Radius or how stayed 33-3/8" Size of manhole or handhole 12" x 16" Water Drums:—Number -
 boiler - Inside Diameter - Thickness of plates - Range of tensile strength - Are drum shell plates -
 or flanged - If fusion welded, state name of welding firm - Have all the requirements of the rules -
 ss I vessels been complied with - Description of riveting:—Cir. seams - long. seam -
 er of rivet holes in long. seams - Pitch of rivets - Thickness of straps -
 age strength of long. joint:—Plate - Rivet - Diameter of tube holes in drum - Pitch of tube holes -
 age strength of drum shell in way of tubes - Water Drum Heads or Ends:—Range of Tensile strength -
 of plates - Radius or how stayed - Size of manhole or handhole -
 rs or Sections:—Number (16) Material Steel Thickness 19/32" Tested by Hydraulic Pressure to 750 lbs.
 :—Diameter 1-1/4" & 2" Thickness .095" & .134" Number (1316) = 1-1/4" Steam Dome or Collector:—Description of -
 o Shell - Inside diameter - Thickness of shell plates - Range of tensile -
 b. - 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 -
 of rivets - Thickness of straps - Percentage strength of long. joint - Plate - Rivet -
 or End Plates:—Range of tensile strength - Thickness - Radius or how stayed -
 ERHEATER. ~~Donkey~~ Headers:—Number in each boiler Upper and Lower Inside Diameter 5-1/2" square
 ess 7/8" Material Steel Range of tensile strength 62,000 to 72,000 lbs. Are drum shell plates welded -
 ged - If fusion welded, state name of welding firm - Have all the requirements of the rules -
 ss I vessels been complied with - Description of riveting:—Cir. seams - long. seams -
 er of rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of -
 joint:—Plate - Rivet - Diameter of tube holes in drum 1-1/4" Pitch of tube holes 1-3/4" Percentage strength of -
 bell in way of tubes - Drum Heads or Ends:—Thickness - Range of tensile strength -
 or how stayed - Size of manhole or handhole - Number, diameter, and thickness of tubes (222), 1 1/4", .120"
 by Hydraulic Pressure to 750 lbs. Date of Test March 1941 Is a safety valve fitted to each section of the superheater which -
 shut off from the boiler - No. and description of Safety Valves - Area of each set -
 es - Pressure to which they are adjusted - Is easing gear fitted -
 e Gear. Has the spare gear required by the rules been supplied -

The foregoing is a correct description,
Babcock & Wilcox Co. Manufacturer.

During progress of work in shops Feb. 17, 27; March 4, 5, 6, 11, 20, 26;
 During erection on board vessel April 1, 14, 1941.

Is the approved plan of boiler forwarded herewith -Total No. of visits -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, &c.) These boilers, unassembled, comprising steam
 ns and headers, were built to this Society's Special Survey Requirements and to Approved Plans,
 o in conformity with the Rules of the United States Bureau of Navigation & Steamboat Inspection.
 cmanship, materials, X-Ray examinations, tension and bend test results of fusion welded joint
 imens and hydraulic tests of drums and headers, were found satisfactory.

Survey Fee £ \$350.00 : When applied for, 10/27/19 41.Travelling Expenses (if any) £ \$ 14.00 : When received, 19Committee's Minute -Signed See N.Y.K. RPT. No. 42277.

NEW YORK APR 8 1942

Engineer Surveyor to Lloyd's Register of Shipping.