

REPORT ON WATER TUBE BOILERS.

Received at London Office SEP 12 1938

Date of writing Report Aug 12th 38 1938. When handed in at Local Office 29th August 1938 Port of Baltimore, Maryland

No. in Survey held at Baltimore, Maryland Date, First Survey 19th October, 1937 Last Survey 8th August 1938

Reg. Bk. 39944 on the Steam Single Sc Oil Tanker "R. W. GALLAGHER" Number of Visits 5 Tons { Gross 7989 Net 4738

Master [Signature] Built at Sparrows Point, Md. By whom built Bethlehem S.B. Corp. When built 1937-38

Engines made at Quincy, Mass. By whom made Bethlehem S.B. Corp. When made 1937

Boilers made at Dansville, & Carteret, N.J. By whom made Foster-Wheeler Corp. When made 1937

Registered Horse Power 3600 Owners Standard Oil Company of New Jersey Port belonging to Wilmington, Delaware

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Lukens & Carnegie, Pa.

(Letter for Record -) Date of Approval of plan - Design Press 450 lbs. on board vessel Number and Description or Type of Boilers Two - Foster Wheeler Type "D" Marine Working Pressure 450 lbs. Tested by Hydraulic Pressure to 675 lbs. Date of Test Jan. 21, 1938

No. of Certificate - Can each boiler be worked separately Yes Total Heating Surface of Boilers 9856 sq. ft.

Is forced draught fitted Yes Area of fire grate (coal) in each Boiler oil burning Total grate area of boilers in vessel including Main and Auxiliary - No. and type of burners (oil) in each boiler 3 - Todd model "FD" No and description of safety valves on each boiler Two - three inch Area of each valve 5.21 approx. Pressure to which they are adjusted 450 lbs.

Are they fitted with casing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler -

Smallest distance between boilers or uptakes and ~~casings~~ casings 2' - 6" Height of Boiler 20' - 3 1/2" Width and Length 10 - 9 1/8 x 16 - 11 1/8

Steam Drums:—Number in each boiler One Inside diameter 42 inches Material of plates Steel O.H. Thickness 1 1/2"

Range of Tensile Strength 60,000 and heads 55,000 Are drum shell plates welded or flanged Welded Description of riveting:—

Cir. seams Welded long. seams Welded Diameter of rivet holes in long. seams - Pitch of Rivets -

Lap of plate or width of butt straps None Thickness of straps None Percentage strength of long. joint:—Plate - Rivet -

Diameter of tube holes in drum 2 1/32" & 1 9/32" Pitch of tube holes 9" - 4 1/2" - 2 3/4" - 2 1/4" Percentage strength of shell in way of tubes 48.7 51, 54.8

If Drum has a flat side state method of staying Drums circular Depth and thickness of girders at centre (if fitted) - Distance apart - Number and pitch of stays in each - Working pressure by rules 450 lbs. Steam Drum Heads or Ends:—Material Steel O.H. Thickness 1 11/32" & 1 5/32" Radius or how stayed Convex

Size of Manhole or Handhole 12" & 16" Water Drums:—Number in each boiler One Inside Diameter 32"

Material of plates Steel O.H. Thickness 1 1/8" Range of tensile strength 60,000 & 55,000 Are drum shell plates welded or flanged welded Description of riveting:—Cir. seams welded long. seams welded Diameter of Rivet Holes in long. seams - Pitch of rivets - Lap of plates or width of butt straps - Thickness of straps None

Percentage strength of long. joint:—Plate welded Rivet - Diameter of tube holes in drum 2 1/32" & 1 9/32" Pitch of tube holes 9" 4 1/2", 2 3/4" & 2 1/4"

Percentage strength of drum shell in way of tubes 48.7, 51, 54.8 Water Drum Heads or Ends:—Material Steel O.H. Thickness 1 1/32" & 23/32"

Radius or how stayed Convex heads Size of manhole or handhole 12" x 16" Headers or Sections:—Number Two

Material Steel Thickness 7/8 wall 7 3/4 sq Tested by Hydraulic Pressure to 675 lbs. on board Material of Stays -

Area at smallest part 7 3/4" sq. Area supported by each stay None C.S. Working Pressure by Rules approved Tubes:—Diameter 2" x 1 1/2"

Thickness 10 & 12 gauge Number 147 - 2" 00 414 - 1 1/2" 00 Steam Dome or Collector:—Description of Joint to Shell None

Percentage strength of Joint - Diameter - Thickness of shell plates - Material -

Description of longitudinal joint - Diameter of Rivet Holes - Pitch of Rivets - Working Pressure of shell by Rules -

Crown or End Plates:—Material - Thickness - How stayed on board ship

SUPERHEATER. Type Drainable Date of Approval of Plan - Tested by Hydraulic Pressure to 675 lbs.

Date of Test Jan. 21, 1938 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Yes

Diameter of Safety Valve 1 1/2" Pressure to which each is adjusted 425 lbs. Is casing gear fitted Yes

Is a drain cock or valve fitted at lowest point of superheater Yes Number, diameter, and thickness of tubes 138 - 1 1/2" & 12

Spare Gear. Tubes 32 @ 2 & 1 1/2" Gaskets or joints:—Manhole 5 Handhole - Handhole plates 9

The foregoing is a correct description,
Foster-Wheeler Corp. Manufacturer.

Dates of Survey { During progress of work in shops - - - } Is the approved plan of boiler forwarded herewith See semi-official correspondence with sister vessel.

{ During erection on board vessel - - - } Total No. of visits eight (8)

October 19, 1937 - August 8th, 1938

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have not been built under Special Survey but have been installed in place on the vessel in compliance with the Society's rules and the workmanship and material are good. During construction the Boilers stated to have been specially surveyed by the Surveyors to the American Bureau of Shipping and material certified. Boilers seen under steam and satisfactory.

Survey Fee £ : ✓ : } When applied for, 19

Travelling Expenses (if any) £ : : } When received, 19

[Signature]
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK AUG 31 1938

Assigned 2 W.T.B. (Spt) - 450 lb