

## REPORT ON WATER TUBE BOILERS.

Received at London Office.

18 AUG 1949

Date of writing Report 3rd June, 1949 When handed in at Local Office 3rd June, 1949 Port of Baltimore, Maryland.  
 No. in Survey held at Sparrows Point, Maryland. Date, First Survey 11th February Last Survey 18th May, 1949  
 Reg. Bk. on the S.S. "JAHRA" (Number of Visits 3) Gross Tons 17905  
 Built at Sparrows Point, Maryland. By whom built Bethlehem Sparrows Point, Shipyard, Inc., When built 1949.  
 Engines made at Quincy, Mass. By whom made Bethlehem Steel Co., When made 1948  
 Boilers made at Carteret, N.J. By whom made Foster Wheeler Corp. When made 1948  
 Nominal Horse Power 3240 Owners Kupan Transport Co., Port belonging to Monrovia

**WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel** Bethlehem Steel Co.,  
 Date of Approval of plan 3rd October, 1948. New York. Number and Description or Type of Tank One - Compressed Air Tank Working Pressure 125 Tested by Hydraulic Pressure to 250 Date of Test 14 Feb. 1949  
 No. of Certificate - Can each boiler be worked separately - Total Heating Surface of Boilers Air Tank  
 Is forced draught fitted - Area of fire grate (coal) in each Boiler Unfired  
 No. and type of burners (oil) in each boiler - No. and description of safety valves on each boiler One - 1" Relief Valve Area of ~~each~~ each valve per rule as fitted .196 Pressure to which they are adjusted 125 Are they fitted with easing 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 bunkers or woodwork Cap. of Tank 30 cu. ft.  
~~Width~~ Length 5' 3 1/2" Air Drums:—Number in each boiler One Inside diameter 35 1/4"  
 Thickness of plates 3/8" Range of Tensile Strength 55,000 - 65,000 p.s.i. Are drum shell plates welded or flanged Welded If fusion welded, state name of welding firm Bethlehem Steel Co., Have all the requirements of the rules for Class I vessels been complied with Yes Description of riveting:—Cir. seams Fusion Weld long. seams Fusion Weld  
 Diameter of rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of long. joint:—Plate 80% Rivet - Diameter of tube holes in drum - Pitch of tube holes -  
 Percentage strength of shell in way of tubes - 36" Dished Radius by Steam Drum Heads or Ends:—Range of tensile strength 55,000 - 65,000 p.s.i.  
 Thickness of plates 3/8" Radius or how stayed 2 1/8" Knuckle Size of manhole or handhole 5" Flanged Pipe Opening Water Drums:—Number in 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 for 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 -  
**Headers or Sections:**—Number - Material - Thickness - Tested by Hydraulic Pressure to -  
**Tubes:**—Diameter - Thickness - Number - **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. Drums or Headers:**—Number in each boiler - Inside Diameter -  
 Thickness - Material - 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 for 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 - Rivet - Diameter of tube holes in drum - Pitch of tube holes - 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 -  
 Tested by Hydraulic Pressure to - Date of Test - 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 -

The foregoing is a correct description,

Manufacturer.

Dates of Survey } During progress of } 11 - 14 February, 1949. } Is the approved plan of Tank forwarded herewith NO  
 while } During erection on } 18th May, 1949. } Will be forwarded with last Sister Ship Hull 4471  
 building } board vessel - - } Total No. of visits 3

Is this boiler a duplicate of a previous case No If so, state vessel's name and report No. -

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This small tank for compressed air system has been constructed under Special Survey, and in accordance with the approved plan. The workmanship and material is good.

The tank has now been installed on vessel and seen under working conditions.

Survey Fee £ - : - : } When applied for, - 19  
 Travelling Expenses (if any) £ - : - : } When received, - 19

Committee's Minute

Assigned See First Entry Report attached

NEW YORK JUL 27 1949

Engine Surveyor to Lloyd's Register of Shipping.