

REPORT ON WATER TUBE BOILERS.

No. 117120

Date of writing Report **10 DEC 1948**

When handed in at Local Office **10 DEC 1948**

Received at London Office **10 DEC 1948**

Port of **LONDON**

No. in Survey held at **LONDON** Date, First Survey **20-8-48** Last Survey **23-8-1948**

on the **S.S. "MARABANK"** (Number of Visits **TWO**) Tons Gross **7269** Net **4468**

By whom built **BETHLEHEM FAIRFIELD SHIPYARD** When built **1943**

By whom made **GENERAL MACHINERY CORP.** When made **1943**

By whom made **BABCOCK & WILCOX, EDGE MOOR IRON WORKS** When made **1943**

Owners **BANK LINE LTD.** Port belonging to **GLASGOW**

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

Boilers **TWO W.T. - BABCOCK & WILCOX MARINE** Working Pressure **250 lbs** Tested by Hydraulic Pressure to **452 Boilers** Date of Test **264.5 SPT**

Can each boiler be worked separately **YES** Total Heating Surface of Boilers **10233 sq. ft.**

Area of fire grate (coal) in each Boiler **FOUR BABCOCK & WILCOX**

No. and description of safety valves on each boiler **2 SPRING LOADED HIGH LIFT AND 1 SUPERHEAT**

Are they fitted with easing gear **YES** In case of donkey boilers state whether steam from main boilers can enter donkey boiler **YES**

Smallest distance between boilers or uptakes and bunkers or woodwork **24"** Height of boiler **18'-2 3/4"**

Width and Length **13'-13 1/4" 12'-10 1/2"** Steam Drums:—Number in each boiler **ONE** Inside diameter **47 3/8"**

Thickness of plates **15/16"** Range of Tensile Strength **WELDED** Are drum shell plates welded **WELDED**

If fusion welded, state name of welding firm **WELDED** Have all the requirements of the rules for Class I vessels been complied with **YES**

Description of riveting:—Cir. seams **YES** long. seams **YES**

Diameter of rivet holes in long. seams **YES** Pitch of rivets **YES** Thickness of straps **YES** Percentage strength of long. joint:—Plate **YES** Rivet **YES**

Diameter of tube holes in drum **4 1/16"** Pitch of tube holes **7"**

Percentage strength of shell in way of tubes **YES** Steam Drum Heads:—Range of tensile strength **YES**

Thickness of plates **16/16"** Radius or how stayed **RADIUS** Size of manhole or handhole **16" x 12"** MUD Water Drums:—Number **ONE**

Inside Diameter **5 3/4"** Thickness of plates **3/8"** Range of tensile strength **YES** Are drum shell plates welded or flanged **SOLID DRAWN**

If fusion welded, state name of welding firm **SOLID DRAWN** Have all the requirements of the rules for Class I vessels been complied with **YES**

Description of riveting:—Cir. seams **YES** long. seam **YES**

Diameter of rivet holes in long. seams **YES** Pitch of rivets **YES** Thickness of straps **YES**

Percentage strength of long. joint:—Plate **YES** Rivet **YES** Diameter of tube holes in drum **4 1/16"** Pitch of tube holes **7"**

Percentage strength of drum shell in way of tubes **YES** MUD Water Drum Heads:—Range of Tensile strength **INTEGRALLY FORGED**

Thickness of plates **9/16"** Radius or how stayed **FLAT ENDS** Size of manhole or handhole **4 1/2" x 5 1/2"**

Leaders or Sections:—Number **22** Material **FORGED STEEL** Thickness **19/32"** Tested by Hydraulic Pressure to **YES**

Tubes:—Diameter **2" and 4"** Thickness **.134" and .203"** Number **44-4" 600-2"** Steam Dome or Collector:—Description of joint to Shell **YES**

Inside diameter **YES** Thickness of shell plates **YES** Range of tensile strength **YES**

Description of longitudinal joint **YES** If fusion welded, state name of welding firm **YES**

Have all the requirements of the rules for Class I vessels been complied with **YES** Diameter of rivet holes **YES**

Pitch of rivets **YES** Thickness of straps **YES** Percentage strength of long. Joint **YES** Plate **YES** Rivet **YES**

Drum or End Plates:—Range of tensile strength **YES** Thickness **YES** Radius or how stayed **YES**

SUPERHEATER. Drums or Headers:—Number in each boiler **TWO** Inside Diameter **6" x 6" x 5/8"**

Thickness **5/8"** Material **FORGED STEEL** Range of tensile strength **YES** Are drum shell plates welded **YES**

flanged **SOLID FORGED** If fusion welded, state name of welding firm **YES** Have all the requirements of the rules for Class I vessels been complied with **YES**

Description of riveting:—Cir. seams **YES** long. seams **YES**

Diameter of rivet holes in long. seams **YES** Pitch of rivets **YES** Thickness of straps **YES** Percentage strength of long. joint:—Plate **YES** Rivet **YES**

Diameter of tube holes **HEADER 2" plus** Pitch of tube holes **3-75"** Percentage strength of drum shell in way of tubes **YES**

Drum Heads or Ends:—Thickness **YES** Range of tensile strength **YES**

Radius or how stayed **YES** Size of manhole or handhole **5 1/2" x 4 1/2"** Number, diameter, and thickness of tubes **22-2" x .134"**

Tested by Hydraulic Pressure to **YES** Date of Test **YES** Is a safety valve fitted to each section of the superheater which can be shut off from the boiler **shut-off**

No. and description of Safety Valves **ONE - 1.25 dia "CONSOLIDATED"** Area of each set of valves **1.227 sq"** Pressure to which they are adjusted **230 lbs** Is easing gear fitted **YES**

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

The foregoing is a correct description,

Manufacturer.

Dates of Survey **During progress of work in shops - -** Is the approved plan of boiler forwarded herewith **YES**

while building **During erection on board vessel - - -** Total No. of visits **YES**

Is this boiler a duplicate of a previous case **IN ESSENTIALS** If so, state vessel's name and report No. **AMERICAN BUILT SINGLE SCREW "SAM" VESSELS THE EC2-S-C1**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **The boiler as seen at this time is of sound construction and good workmanship and suitable, in my opinion, for a classed vessel.**

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

Committee's Minute **7 JAN 1949**

Assigned **As now**

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Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

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