

REPORT ON WATER TUBE BOILERS

No. 8437

18 APR 1947

Received at London Office

Date of writing Report **7th Mar.** 19**47** When handed in at Local Office **21st Mar.** 19**47** Port of **Baltimore, Maryland**
 No. in Survey held at **Baltimore, Maryland** Date, First Survey **January 13th, 1947** Last Survey **February 3rd, 1947**
 Reg. Bk. **72125** on the **S.S. "CHELATROS" (ex "Edward K. Collins")** (Number of Visits **4**) {Gross **7176**
 Built at **Panama City, Florida** By whom built **J. A. Jones Construction Co., Inc.** When built **1944**
 Engines made at **Hamilton, Ohio** By whom made **General Machining Corporation** When made **1944**
 Boilers made at **New York** By whom made **Combustion Engineering Company** When made **1944**
 Nominal Horse Power **644.8** Owners **Kassos Steamship Navigation Co., Ltd.** Port belonging to **Syra**

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel **Bethlehem Tenn. C.I. & R.R. Co.**
 Date of Approval of plan **A.B. Rules for hydr. test 1 1/2 WP. Accepted by Committee**

No. of Boilers **Two - Water tube** Working Pressure **240 lbs.** Tested by Hydraulic Pressure to **375 lbs.** Date of Test **25/8/44**
 No. of Certificate **-** Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **9704 sq. ft. + 529 sq. ft.**
 forced draught fitted **Yes** Area of fire grate (coal) in each Boiler **-** = **10.233**
 No. and type of burners (oil) in each boiler **Four Todd "Hex-Press"**

No. and description of safety valves on each boiler **One twin Consolidated** Area of each set of valves per boiler {per rule **22.9 square inches** for ordinary valves
 as fitted **25.12 square inches** + 1.76 sq. in. Pressure to which they are adjusted **240 lbs.** 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 **-** Height of boiler **16' 5 5/8"**

Width and Length **14' 7 1/2" x 18' 7 1/2"** Steam Drums:—Number in each boiler **One** Inside diameter **48"**
 Thickness of plates **15/16"** Range of Tensile Strength **70,000 - 82,000 lbs.** Are drum shell plates welded **welded**
 If fusion welded, state name of welding firm **Combustion Eng. Co., New York** Have all the requirements of the rules for Class I vessels been complied with **Built under ABS & USCG**

Description of riveting:—Cir. seams **-** long. seams **-** Thickness of straps **-** Percentage strength of long. joint:—Plate **-** Rivet **-** Diameter of tube holes in drum **4 1/64"** Pitch of tube holes **7"**
 Percentage strength of shell in way of tubes **42.5** Steam Drum Heads or Ends:—Range of tensile strength **60,000 - 70,000 lbs.**
 Thickness of plates **15/16"** Radius ~~xxxxxxx~~ **38"** Size of manhole or handhole **12" x 16"** Water Drums:—Number **-**
 Are drum shell plates welded or flanged **Solid drawn** header Thickness of plates **3/4"** Range of tensile strength **60,000-70,000** Are drum shell plates welded or flanged **Solid drawn**

If fusion welded, state name of welding firm **-** Have all the requirements of the rules for Class I vessels been complied with **A.B.S. & U.S.C.G.** 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 ~~xxxx~~ **4 1/32"** Pitch of tube holes **7"**
 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 **22** Material **Steel** Thickness **9/16"** Tested by Hydraulic Pressure to **375 lbs.**
 Diameter **2" and 4"** Thickness **10 and 6 B.W.G.** Number **602 and 44** Steam Dome or Collector:—Description of **-**
 Diameter **-** 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 **-**
 Thickness of straps **-** Percentage strength of long. joint **-** Plate **-** Rivet **-**
 Range of tensile strength **-** Thickness **-** Radius or how stayed **-**

Superheater. Headers:—Number in each boiler **Two** Inside Diameter **6" square**
 Thickness **5/8"** Material **Steel** Range of tensile strength **60,000 - 70,000** Are drum shell plates welded **-**
 Are drum shell plates welded or flanged **forged** If fusion welded, state name of welding firm **-** Have all the requirements of the rules for Class I vessels been complied with **A.B.S. & U.S.C.G.**

Description of riveting:—Cir. seams **-** long. seams **-** Thickness of straps **-** Percentage strength of long. joint:—Plate **-** Rivet **-** Diameter of tube holes in drum **2 1/64"** Pitch of tube holes **3 3/4"** Percentage strength of drum shell in way of tubes **-** Drum Heads or Ends:—Thickness **-** Range of tensile strength **-**

Size of manhole or handhole **-** Number, diameter, and thickness of tubes **22, 2", 10 B.W.G.**
 Tested by Hydraulic Pressure to **375 lbs.** Date of Test **25/8/44** Is a safety valve fitted to each section of the superheater which can be shut off from the boiler **Yes**
 No. and description of Safety Valves **One - high lift** Area of each set of valves **1.76 square inches** Pressure to which they are adjusted **230 lbs.** Is easing gear fitted **No**

Easing Gear. Has the spare gear required by the rules been supplied **Yes**

The foregoing is a correct description,

Manufacturer.

During progress of survey work in shops - - -
 During erection on board vessel - - -
 Is the approved plan of boiler forwarded herewith
 Total No. of visits

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **The two W. T. boilers described above have, together with all mountings, been opened up, examined throughout, placed in order, and again examined under steam and in the opinion of the undersigned, the workmanship is good, the boilers well installed and suitable to be classed with this category with record of BS 2-47.**

Survey Fee £ **\$115.00** When applied for, **21 Mar.** 19 **47**
 Travelling Expenses (if any) £ : : When received, - 19

Committee's Minute **NEW YORK MAR 26 1947**

Signed **2 WTB - 240 lbs.**

Engineer Surveyor to Lloyd's Register of Shipping.