

## REPORT ON WATER TUBE BOILERS

No. 8437

18 APR 1947

Received at London Office

Date of writing Report **7th Mar. 1947** When handed in at Local Office **21st Mar. 1947** 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 1½ x 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 **-**  
 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. ft.  
 Are they fitted with easing gear **Yes** In case of donkey boilers state whether steam from main boilers can enter

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"** 47 ft. in factory ship

Thickness of plates **15/16"** Range of Tensile Strength **70,000 - 82,000 lbs.** Are drum shell plates welded

flanged **welded** If fusion welded, state name of welding firm **Combustion Eng. Co., New York** Have all the requirements of the rules

Class I vessels been complied with **Built under ABS & USCG** 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 **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 ~~xxxxxx~~ **38"** Size of manhole or handhole **12" x 16"** Water Drums:—Number

each boiler **None** Inside Diameter **Square** header Thickness of plates **3/4"** Range of tensile strength **60,000-70,000** Are drum shell plates

loaded or flanged **Solid drawn** If fusion welded, state name of welding firm **-** Have all the requirements of the rules

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.**

Bores:—Diameter **2" and 4"** Thickness **10 and 6 B.W.G.** Number **602 and 44** Steam Dome or Collector:—Description of

ant to Shell **-** Inside diameter **-** Thickness of shell plates **-** Range of tensile

Length **-** 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 **-**

Thickness of straps **-** Percentage strength of long. joint **-** Plate **-** Rivet **-**

Down or End Plates:—Range of tensile strength **-** Thickness **-** Radius or how stayed **-**

deck **PERHEATER. Drum 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

flanged **forged** If fusion welded, state name of welding firm **-** Have all the requirements of the rules

Class I vessels been complied with **A.B.S. & U.S.C.G.** Description of riveting:—Cir. seams **-** long. seams **-**

Diameter of rivet holes in long. seams **-** Pitch of rivets **-** Thickness of straps **-** Percentage strength of

joint:—Plate **-** Rivet **-** Diameter of tube holes in drum **2 1/64"** Pitch of tube holes **3 3/4"** Percentage strength of

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 **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

be shut off from the boiler **Yes** No. and description of Safety Valves **One - high lift** Area of each set

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

Is 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.) **The two W. T. boilers described above have, together**  
**all mountings, been opened up, examined throughout, placed in order, and again examined under steam and in the**  
**presence 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. 1947**

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.