

# REPORT ON WATER TUBE BOILERS.

No. 47695

Received at London Office 31 MAY 1947

Date of writing Report \_\_\_\_\_ 19\_\_\_\_ When handed in at Local Office \_\_\_\_\_ 19\_\_\_\_ Port of NEW YORK.  
 No. in Survey held at BROOKLYN, N.Y. Date, First Survey February 27 Last Survey April 14<sup>th</sup> 1947.  
 Reg. No. 76250 on the S.S. VIKDAL, (EX JOHN MASON). (Number of Visits 6) Tons {Gross 7176  
 Net 4380.  
 Built at SO PORTLAND, ME. By whom built NEW ENGLAND S.B. CORP. When built 1943.  
 Engines made at WEST SPRINGFIELD, MASS. By whom made HARRISBURG MACHINERY CORP. When made 1943.  
 Boilers made at LOUISVILLE, KY. By whom made HENRY VOGT CO. When made 1943.  
 Nominal Horse Power \_\_\_\_\_ Owners TANKERS CORPORATION. Port belonging to PANAMA CITY.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel WORTH STEEL CO. CLAYMONT, DEL.

Date of Approval of plan \_\_\_\_\_ Number and Description or Type of Boilers 2 - BABCOCK + WILCOX, CROSSDRUM. Working Pressure 240 LBS. Tested by Hydraulic Pressure to 500 LBS. Date of Test 8-21-43.

No. of Certificate AMERICAN BUREAU Can each boiler be worked separately YES Total Heating Surface of Boilers 10232 sq. ft.

Is forced draught fitted YES Area of fire grate (coal) in each Boiler \_\_\_\_\_

No. and type of burners (oil) in each boiler 4 - BABCOCK + WILCOX. No. and description of safety valves on each boiler 1 - 4" DUPLEX.

Are they fitted with easing gear YES Area of each set of valves per boiler {per rule \_\_\_\_\_ as fitted 25 sq. in. Pressure to which they are adjusted 240 LBS.

In case of donkey boilers state whether steam from main boilers can enter be donkey boiler NO WOODWORK. Height of boiler 15' 3 7/8"

Width and Length 14' 7 3/4" X 4' 4 1/8" Steam Drums:—Number in each boiler ONE. Inside diameter 47 3/8"

Thickness of plates 15/16" Range of Tensile Strength 70,000 Are drum shell plates welded or flanged WELDED.

If fusion welded, state name of welding firm HENRY VOGT MACH CO. LOUISVILLE, KY. Have all the requirements of the rules for Class I vessels been complied with AMERICAN BUREAU

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 1/32" Pitch of tube holes 7"

Percentage strength of shell in way of tubes \_\_\_\_\_ Steam Drum Heads or Ends:—Range of tensile strength 65,000.

Thickness of plates 15/16" Radius or how stayed \_\_\_\_\_ Size of manhole or handhole 12" X 16" Water Drums:—Number in each boiler \_\_\_\_\_

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 22 Material STEEL Thickness 19/32" Tested by Hydraulic Pressure to 500 lbs. per sq. in.

Tubes:—Diameter 4" - 2" Thickness 4.6 BWG. 2" 40 BWG. Number 4" 88 2" 602 Steam Dome or Collector:—Description of Joint to Shell NONE

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 ONE Inside Diameter 7 1/4" ? outside

Thickness 5/8" Material STEEL Range of tensile strength 60,000 - 70,000 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 AMERICAN BUREAU

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 500 LBS. Date of Test \_\_\_\_\_ 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 1 - 1 1/2" Area of each set of valves 176 sq. in. Pressure to which they are adjusted 230 lbs Is easing gear fitted No

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 \_\_\_\_\_

Is this 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.) These Water tube boilers designed and constructed by the Babcock & Wilcox Co and Henry Vogt Machine Corp were constructed under special survey of American Bureau of Shipping & have now been examined over all parts, subjected to hydraulic pressure and found in good condition.

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

NEW YORK MAY 7 1947

*J. G. J.*

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

Committee's Minute \_\_\_\_\_

Assigned 2 WT B (OPT) 240 lbs.