

REPORT ON WATER TUBE BOILERS.

No. 42277

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Date of writing Report MAR 14 1942 When handed in at Local Office MAR 30 1942 Port of NEW YORK (BOSTON DISTRICT)

No. in Survey held at QUINCY, MASS. Date, First Survey FEB 2 Last Survey MAR 28 1942

Reg. Bk. on the STEEL SINGLE SCREW TANKER "SHELDON CLARK" (Number of Visits 13) Tons { Gross 10804 Net 6355

Boilers Built at QUINCY, MASS. By whom built BETHLEHEM STEEL CO. When built 1941-42

Engines made at BENTON, N.Y. By whom made DE LAVAL STEAM TURBINE CO. When made 1941

Boilers made at BARTERSON, OHIO By whom made BABCOCK-WILCOX CO. When made 1941

Nominal Horse Power 1400 Owners SINCLAIR REFINING CO. Port belonging to WILMINGTON, DEL.

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

Date of Approval of plan SEPTEMBER 1940 Number and Description or Type

Boilers (K) SINGLE DRUM TYPE Working Pressure 500 LBS Tested by Hydraulic Pressure to 750 Date of Test MAR 20-1942

No. of Certificate — Can each boiler be worked separately YES Total Heating Surface of Boilers 5555 SQ FT (EXCL)

Is forced draught fitted YES Area of fire grate (coal) in each Boiler — = 11,110 total

No. and type of burners (oil) in each boiler THREE (3) 1000 "HEX-PRESS" TYPE No. and description of safety valves on

each boiler TWO (2) SPRING LOADED Area of each set of valve 4.9 SQ IN EACH Pressure to which they are adjusted 500 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 NO WOODWORK Height of boiler 18'-1 1/4" Width and Length 11'-9 1/2" x 14'-1 1/2"

Steam Drums:—Number in each boiler ONE Inside diameter 42 1/16" Thickness of plates 25/32" - 1 1/8"

Range of Tensile Strength 7000 TO 82,000 Are drum shell plates welded or flanged WELDED Description of riveting:—

Cir. seams — long. seams — Diameter of rivet holes in long. seams — Pitch of rivets —

Lap of plate or width of butt straps — Thickness of straps — Percentage strength of long. joint:—Plate 90% Rivet —

Diameter of tube holes in drum 4 1/32" Pitch of tube holes 7" Percentage strength of shell in way of tubes 42.41

Working pressure by rules — Steam Drum Heads or Ends:—Range of tensile strength 65-77,000 LBS Thickness of plates 1 5/16"

Radius or how stayed 33 3/8" Size of manhole or handhole 12" x 16" Working pressure by rules — Water Drums:—Number

each boiler — Inside Diameter — Thickness of plates — Range of tensile strength — Are drum shell plates

welded or flanged — Description of riveting:—Cir. seams — long. seam — Diameter of rivet holes in

long. seams — Pitch of rivets — Lap of plates or width of butt straps — 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 — Working pressure by rules — Water Drum Heads or Ends:—Range of

tensile strength — Thickness of plates — Radius or how stayed —

Size of manhole or handhole — Working pressure by rules — Headers or Sections:—Number (16) SIXTEEN

Material STEEL Thickness 1 1/32" Tested by Hydraulic Pressure to 750 LBS Tubes:—Diameter 1 1/4" AND 2"

Thickness .095" - .134" Number 1316 - 1 1/4" Steam Dome or Collector:—Description of Joint to Shell —

Inside diameter — Thickness of shell plates — Range of tensile strength —

Description of longitudinal joint — Diameter of rivet holes — Pitch of rivets — Lap of plate or width of

butt straps — Thickness of straps — Percentage strength of long. joint:—Plate — Rivet —

Working Pressure of shell by rules — Crown or End Plates:—Range of tensile strength —

Thickness — Radius or how stayed — Working pressure by rules —

SUPERHEATER. Drums or Headers:—Number in each boiler UPPER AND LOWER Inside Diameter 5 1/2" SQUARE

Thickness 7/8" Material STEEL Range of tensile strength 62000 - 72000 LBS Are drum shell plates welded

flanged — Description of riveting:—Cir. seams — long. seams — Diameter of rivet holes in

long. seams — Pitch of rivets — Lap of plates or width of butt straps — Thickness of straps —

Percentage strength of long. joint:—Plate — Rivet — Diameter of tube holes in drum 1 1/4" Pitch of tube holes 1 3/4"

Percentage strength of drum shell in way of tubes — Working pressure by rules — Drum Heads or Ends:—

Thickness — Range of tensile strength — Radius or how stayed — Size of manhole or handhole —

Working pressure by rules — Number, diameter, and thickness of tubes 222-1 1/4" .120 Tested by Hydraulic Pressure to 750 LBS.

Date of Test MAR 20-1942 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 SPRING LOADED Area of each set of valves 1.76 SQ. IN.

Pressure to which they are adjusted 468 Is easing gear fitted YES

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

The foregoing is a correct description,
Bethlehem Steel Company
Shipbuilding Division
Fore River Yard
General Manager

Dates { During progress of work in shops - - } SEE CLEVELAND REPORT N° 1073 Is the approved plan of boiler forwarded herewith NO

while { During erection on board vessel - - } FEB 2-13-23 MAR 7-11-12-17-20-21-24-25-26-27 Total No. of visits 13

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) THESE BOILERS HAVE BEEN

ERECTED AND FIRED ON BOARD THE VESSEL IN ACCORDANCE WITH THE RULES

AND APPROVED PLANS. THE MATERIALS AND WORKMANSHIP ARE GOOD AND IN

MY OPINION THE VESSEL IS ELIGIBLE TO HAVE THE NOTATION 2 WTB (SPT) 500 LBS.

Survey Fee £ ✓ : : When applied for, ✓ 19

Travelling Expenses (if any) £ : : When received, 19

Committee's Minute NEW YORK APR 8 1942

Assigned 2 WTB (SPT) 500 LBS.

Engineer Surveyor to Lloyd's Register of Shipping.

