

# REPORT ON WATER TUBE BOILERS.

No. 105405

9 JUL 1948

Received at London Office

Date of writing Report 19 2 JUL 1948 When handed in at Local Office 2 JUL 1948 Port of NEWCASTLE-ON-TYNE

No. in Survey held at South Shields Date, First Survey 11/5/48 Last Survey 17/6/48 19

Reg. Bk. 37918 on the Turbo Electric 'TURBINELLUS' (Number of Visits 20) Tons { Gross 10640 Net 6302

Built at Portland Oregon By whom built Kaiser Co. Inc. When built 1944

Engines made at Shenectady By whom made G. E. Co. When made 1944

Boilers made at New York By whom made General Eng. Co. New York When made 1944

Nominal Horse Power \_\_\_\_\_ Owners Anglo Saxon Petroleum Co. Ltd Port belonging to London

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

Date of Approval of plan \_\_\_\_\_ Number and Description or Type of Boilers 2 - S.M. Type Working Pressure 500 Tested by Hydraulic Pressure to 750 Date of Test \_\_\_\_\_

No. of Certificate \_\_\_\_\_ Can each boiler be worked separately Yes Total Heating Surface of Boilers 11,354 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 - Lodd's 'H express' No. and description of safety valves on each boiler 2 - 2 1/2" dia. duplex consolidated Area of each set of valve 4.9 sq. ins. Pressure to which they are adjusted 500 lbs/sq. in.

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 5' 0" Height of boiler 21' 0" Width and Length 11' 0" x 15' 6"

Steam Drums:—Number in each boiler One Inside diameter 42" Thickness of plates 1 1/32" & 3/4"

Range of Tensile Strength \_\_\_\_\_ 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 \_\_\_\_\_ Rivet \_\_\_\_\_

Diameter of tube holes in drum 4" & 5/8" Pitch of tube holes 7" Percentage strength of shell in way of tubes \_\_\_\_\_

Working pressure by rules \_\_\_\_\_ Steam Drum Heads or Ends:—Range of tensile strength \_\_\_\_\_ Thickness of plates 1 1/4"

Radius or how stayed Ellipsoidal Size of manhole or handhole 12" x 16" Working pressure by rules \_\_\_\_\_ Water Drums:—Number in 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 14

Material Steel Thickness 9/16" Tested by Hydraulic Pressure to \_\_\_\_\_ Tubes:—Diameter 1 1/2" & 2" & 4"

Thickness 13 & 10 & 5 BWG Number 1148, 56, 48 Steam Drums or Collector:—Description of Joint to Shell Welded

Inside diameter 7 1/4" & 7 1/4" Thickness of shell plates 3/16" 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, Inter-drum Drums or Headers:—Number in each boiler Two Inside Diameter 5 3/4" x 5 3/4"

Thickness 9/16" Material Steel Range of tensile strength \_\_\_\_\_ Are drum shell plates welded or 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" - VI BWG Pitch of tube holes 2 1/2"

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 145 - 1 1/2" - VI BWG Tested by Hydraulic Pressure to \_\_\_\_\_

Date of Test \_\_\_\_\_ Is a safety valve fitted to each section of the superheater which can be shut off from the boiler No

No. and description of Safety Valves 1 - 1 1/2" consolidated type Area of each set of valves 1.23 sq. ins.

Pressure to which they are adjusted 473 lbs/sq. in. Is easing gear fitted Yes

Spare Gear. Has the spare gear required by the rules been supplied A number of 1 1/2" & 2" & 4" and 1 1/4" (opt)

water tubes HS plates = 4934 lb Total for 26 lbs  
--- spb = 743 lb = 11354 lb

The foregoing is a correct description, \_\_\_\_\_

Manufacturer. \_\_\_\_\_

Dates of Survey { During progress of work in shops - - } Is the approved plan of boiler forwarded herewith \_\_\_\_\_

{ 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 W.T. boilers have been constructed under the supervision of the U.S. Coast Guards and the American Bureau of Shipping. The scantlings have been verified as far as practicable. The materials and workmanship considered good.

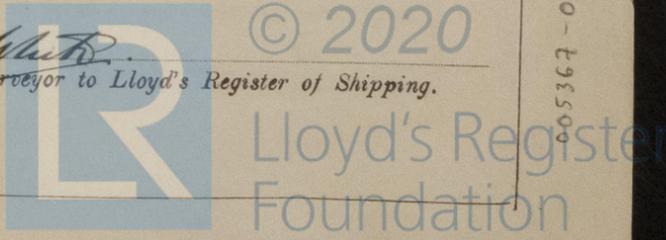
Survey Fee ... .. £ \_\_\_\_\_ : : When applied for, \_\_\_\_\_ 19

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

Committee's Minute FRI. 13 AUG 1948 \_\_\_\_\_

Assigned See F.E. Mohy, rpt. \_\_\_\_\_

Shas M. White © 2020  
Engineer Surveyor to Lloyd's Register of Shipping.



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