

## REPORT ON WATER TUBE BOILERS.

No. 3729

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Writing Report 19 When handed in at Local Office 19 Port of Seattle, Washington

Survey held at Seattle, Washington Date, First Survey Oct. 13, 1947 Last Survey February 20th 19 48

on the Steel Tank Steamer "MINERVE" (ex "Donner Lake") (Number of Visits 26) Gross 10448 Tons Net 6301

Portland, Oregon By whom built Kaiser Company, Inc. When built 1944

made at Lynn, Mass. By whom made General Electric Co. When made 1944

made at St. Louis, Missouri By whom made Combustion Engineering Co. When made 1944

al Horse Power 1324 Owners Government of France Port belonging to LeHavre (Contemplated)

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Bethlehem & Worth

Approval of plan American Bureau Number and Description or Type W.T. Single pass straight tube

Working Pressure 500 PSI Tested by Hydraulic Pressure to 750 PSI Date of Test -

Certificate X Can each boiler be worked separately Yes Total Heating Surface of Boilers 11354 sq. ft.

and draught fitted Yes Area of fire grate (coal) in each Boiler Oil Fired

type of burners (oil) in each boiler 4 Todd, Pressure Type, Hagen Meter Co. controls No. and description of safety valves on 2-2 1/2" Dia. Spring Loaded High Lift

Area of each set of valves per boiler per rule 7.00 sq. in. as fitted 9.80 sq. in. Pressure to which they are they fitted with easing gear Yes

In case of donkey boilers state whether steam from main boilers can enter donkey boiler X Smallest distance between boilers or uptakes and bunkers 5'0" Height of boiler 21'0"

and Length 11'10" x 16'0" Steam Drums:—Number in each boiler One Inside diameter 42"

ess of plates 3/4" - 1-19/32" Range of Tensile Strength 70,000 lbs. Min. Are drum shell plates welded Welded

If fusion welded, state name of welding firm Combustion Engineering Co. Have all the requirements of the rules Yes. AB & USCG

Description of riveting:—Cir. seams X long. seams X

er of rivet holes in long. seams X Pitch of rivets X Thickness of straps X Percentage strength of Joint:—Plate X Rivet X

Diameter of tube holes in drum 4" Pitch of tube holes 7"

age strength of shell in way of tubes X Steam Drum Heads or Ends:—Range of tensile strength 70,000 Min.

ess of plates 1-1/4" Radius or how stayed Ellipsoidal Size of manhole or handhole 12" x 16" Water Drums:—Number boiler X

Inside Diameter X Thickness of plates X Range of tensile strength X Are drum shell plates or flanged X

If fusion welded, state name of welding firm X Have all the requirements of the rules Yes. AB & USCG

Description of riveting:—Cir. seams X long. seam X

er of rivet holes in long. seams X Pitch of rivets X Thickness of straps X

age strength of long. joint:—Plate X Rivet X Diameter of tube holes in drum X Pitch of tube holes X

age strength of drum shell in way of tubes X Water Drum Heads or Ends:—Range of Tensile strength X

ess of plates X Radius or how stayed X Size of manhole or handhole X

rs or Sections:—Number 14 Material O.H.S. Thickness 9/16 3/4" Tested by Hydraulic Pressure to 1000 PSI

Diameter 1 1/2", 1 1/4", 2", 3 1/4", 4", 4 1/2" thickness 11, 13, 14, 10, 5 or 6 BWG Number 219, 1148-882, 56, 36 Team Dome or Collector:—Description of Shell X

Inside diameter X Thickness of shell plates X Range of tensile X

Description of longitudinal joint X If fusion welded, state name of welding X

Have all the requirements of the rules for Class I vessels been complied with X Diameter of rivet holes X

Thickness of straps X Percentage strength of long. joint X Plate X Rivet X

or End Plates:—Range of tensile strength X Thickness X Radius or how stayed X

ERHEATER. ~~Boilers~~ Headers:—Number in each boiler Two Inside Diameter 7-1/4" Square

7/8" Material O.H.S. Range of tensile strength 55,000 Lbs. Min. Are drum shell plates welded X

If fusion welded, state name of welding firm X Have all the requirements of the rules X

Description of riveting:—Cir. seams X long. seams X

er of rivet holes in long. seams X Pitch of rivets X Thickness of straps X Percentage strength of Joint:—Plate X Rivet X

Diameter of tube holes in drum 1-1/4" Pitch of tube holes X Percentage strength of ell in way of tubes X

Drum Heads or Ends:— X Thickness X Range of tensile strength X

Size of manhole or handhole X Number, diameter, and thickness of tubes X

by Hydraulic Pressure to X Date of Test X Is a safety valve fitted to each section of the superheater which shut off from the boiler Cannot be shut off

No. and description of Safety Valves One 1-1/2" Single High Lift Area of each set 1.767 sq. ins.

Pressure to which they are adjusted 474 lbs. per sq. in. Is easing gear fitted Yes

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

H.S. per boiler = 4934  
Sft = 743

Total for 2 boilers = 11354

The foregoing is a correct description,

Manufacturer.

During progress of work in shops - - - Is the approved plan of boiler forwarded herewith

During erection on board vessel - - - Total No. of visits

Boiler a duplicate of a previous case X If so, state vessel's name and report No. X

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The above W.T. Boilers and Superheaters have been under the supervision of the American Bureau of Shipping and the U. S. Coast Guard. The scantlings have been led as far as practicable. The workmanship is good and the materials sound. For opinions as to class, etc. see Rpt. 9.

Fee £ : : When applied for, 19

Selling Expenses (if any) £ SEE RPT. 9: When received, 19

Committee's Minute

Red 2 W.T.B. (SPT) 500 lbs.

NEW YORK APR 7 1948

James F. Robertson  
Engineer Surveyor to Lloyd's Register of Shipping.

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