

REPORT ON WATER TUBE BOILERS.

No. 7272

Received at London Office

Date of writing Report 15th April 1937 When handed in at Local Office 15th April 1937 Port of Philadelphia

No. in Survey held at Chester Pa Date, First Survey 16 Nov 1936 Last Survey March 30 1937
Reg. Bk. MV TEXAS. SUN. (Number of Visits 12)

Master John J. ... Built at Chester Pa By whom built Sun Ship Bldg Co When built 1937
Engines made at Chester Pa By whom made Sun Ship Bldg Co When made "
Boilers made at Cleveland O. Chester Pa By whom made Foster Wheeler Corp When made "
Registered Horse Power 1145 Owners Sun Oil Co Port belonging to Philadelphia

WATER TUBE BOILERS ~~MAIN, AUXILIARY, OR DONKEY.~~ Manufacturers of Steel Bethlehem Steel Co

(Letter for Record One. Sectional Header Type) Date of Approval of plan 7 Nov 1936 Number and Description or Type Dec 11 1936
of Boilers One. Sectional Header Type Working Pressure 245 lb Tested by Hydraulic Pressure to 375 Date of Test March 16 1937

No. of Certificate 697 Can each boiler be worked separately Yes Total Heating Surface of Boilers 5260

Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 5 Total grate area of boilers in vessel including Main and Auxiliary 5 No. and type of burners (oil) in each boiler 5 Jodd type No and description of safety valves on each boiler 2. 4" Spring loaded Area of each valve 12.56 Pressure to which they are adjusted 245 lb

Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 18'-2" Height of Boiler 18'-2" Width and Length 16'-7 1/4" x 18'-6 1/2"

Steam Drums:—Number in each boiler 1 Inside diameter 42" Material of plates Steel Thickness 15/16"
Range of Tensile Strength 60/70000 lbs Are drum shell plates welded or flanged Union Welded Description of riveting:—
Cir. seams Union Welded long. seams Union Welded 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 1/32" Pitch of tube holes 7" Percentage strength of shell in way of tubes 42.4

If Drum has a flat side state method of staying No flat side Depth and thickness of girders at centre (if fitted) " Distance apart " Number and pitch of stays in each " Working pressure by rules 250 lbs

Steam Drum Heads or Ends:—Material Steel Thickness 15/16" Radius or how stayed 42" radius
Size of Manhole or Handhole 12" x 16" Water Drums:—Number in each boiler " Inside Diameter "

Material of plates " Thickness " 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 " Pitch of tube holes "
Percentage strength of drum shell in way of tubes " Water Drum Heads or Ends:—Material " Thickness "

Radius or how stayed " Size of manhole or handhole " Headers or Sections:—Number 22 sections
Material Steel Thickness 5/8" Tested by Hydraulic Pressure to 368 lb Material of Stays "

Area at smallest part " Area supported by each stay " Working Pressure by Rules " Tubes:—Diameter 2"
Thickness No 10 BWG Number 660 Steam Dome or Collector:—Description of Joint to Shell "

Percentage strength of Joint " Diameter " Thickness of shell plates " Material "
Description of longitudinal joint " Diameter of Rivet Holes " Pitch of Rivets " Working Pressure of shell by Rules "

Crown or End Plates:—Material " Thickness " How stayed "
SUPERHEATER. Type Tubular Date of Approval of Plan 7 Nov 1936 Tested by Hydraulic Pressure to 375 lb

Date of Test March 16 1937 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Yes
Diameter of Safety Valve 3" Pressure to which each is adjusted 242 lb Is easing gear fitted Yes

Is a drain cock or valve fitted at lowest point of superheater Yes Number, diameter, and thickness of tubes 14. 2" No 9
Spare Gear. Tubes " Gaskets or joints:—Manhole 6 Handhole 20 Handhole plates 5

Boilers 37 Handhole plates 20
24 tube stoppers. 6 414 20
The foregoing is a correct description, Manufacturer.

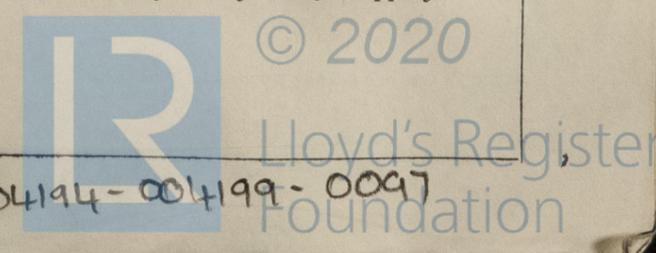
Dates of Survey } During progress of work in shops - - } Cleveland O. Jan 15, Danville OH Jan 20 1937. Is the approved plan of boiler forwarded herewith Yes.
while building } During erection on board vessel - - } Make Nov 16-24-30. Dec 17-28 1936.
Feb 5-8. March 12-16-30. 1937 Total No. of visits 12.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The above donkey boiler has been constructed under special survey, and in accordance with the approved plans, the workmanship & materials are good. The boiler has been subjected in a hydrostatic test of 368 lbs & found satisfactory. The boiler has been satisfactorily installed on board the vessel, and the safety valves adjusted under steam to 245 lbs. In my opinion the boiler is eligible to receive the record of 1 WTDB 245-lb.

Survey fee \$110.00 When applied for, 20th April 1937
Travelling Expenses (if any) \$45.10 When received, 10.6 1937
Cleveland 5.00
Phila 5.00

Committee's Minute NEW YORK APR 28 1937 Engineer Surveyor to Lloyd's Register of Shipping. W.A. Cumham

Assigned 1 WTDB - 245-lb



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