

REPORT ON WATER TUBE BOILERS.

No. 37268

Received at London Office

Date of writing Report 11 Jan 1937 When handed in at Local Office 11 Jan 1937 Port of NEW YORK

No. in Survey held at CARTARET N.J. Date, First Survey 8 Dec 1936 Last Survey 4 Jan 1937
 Reg. Bk. on the M.V. (SUN S. B. Co. HULL #159) (Number of Visits 3) Tons ^{Gross} _{Net}
 Master Built at CHESTER PA. By whom built SUN S. B. Co. When built 1937
 Engines made at CHESTER PA. By whom made SUN S. B. Co. When made 1937
 Boilers made at CARTARET N.J. DANVILLE N.J. By whom made FOSTER WHEELER CORP. When made 1937
 Registered Horse Power 1145 Owners SUN OIL Co. Port belonging to _____

WATER TUBE BOILERS ~~XXXXXXXXXXXX~~ DONKEY.—Manufacturers of Steel LUKENS STEEL Co.
 (Letter for Record S) Date of Approval of plan 4 Nov 1936 Number and Description or Type of Boilers ONE WATER TUBE (EXHAUST GAS FIRED ONLY) Working Pressure 200 LBS Tested by Hydraulic Pressure to 400 LBS Date of Test _____
 No. of Certificate _____ Can each boiler be worked separately Total Heating Surface of Boilers 1872 sq. ft.
 Is forced draught fitted Area of fire grate (coal) in each Boiler } BOILER IS EXHAUST GAS FIRED ONLY Total grate area of boilers in vessel including Main and Auxiliary MOTOR VESSEL No. and type of burners (oil) in each boiler } No. and description of safety valves on each boiler ONE SPRING LOADED Area of each valve 1.77 SQ IN Pressure to which they are adjusted 110 LBS
 Are they fitted with easing gear YES In case of donkey boilers state whether steam from main boilers can enter the donkey boiler 6-9 1/2
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ Height of Boiler _____ Width and Length _____
Steam Drums:—Number in each boiler ONE Inside diameter 30" Material of plates STEEL Thickness 7/16
 Range of Tensile Strength 60/70000 LBS Are drum shell plates welded or flanged FUSION WELDED Description of riveting:—
 Cir. seams FUSION WELDED long. seams FUSION WELDED Diameter of rivet holes in long. seams _____ Pitch of Rivets _____
 Lap of plate or width of butt straps FUSION WELDED Thickness of straps _____ Percentage strength of long. joint:—Plate 90% ALLOWED Rivet _____
 Diameter of tube holes in drum 2 3/32" Pitch of tube holes 4 3/8" Percentage strength of shell in way of tubes 58.4%
 If Drum has a flat side state method of staying NO FLAT SIDE Depth and thickness of girders at centre (if fitted) NONE Distance apart _____ Number and pitch of stays in each _____ Working pressure by rules 227 LBS **Steam Drum Heads or Ends:**—Material STEEL Thickness 1/2" + 19/32" Radius or how stayed 30" R
Water Drums:—Number in each boiler NONE 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 _____ Material _____ Thickness _____ Tested by Hydraulic Pressure to _____ Material of Stays _____ Area at smallest part _____ Area supported by each stay _____ Working Pressure by Rules _____ **Tubes:**—Diameter _____ Thickness _____ Number _____ **Steam Dome or Collector:**—Description of Joint to Shell NONE 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 NONE Date of Approval of Plan _____ 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 _____
 Diameter of Safety Valve _____ Pressure to which each is adjusted _____ Is easing gear fitted _____
 Is a drain cock or valve fitted at lowest point of superheater _____ Number, diameter, and thickness of tubes _____
Spare Gear. Tubes _____ Gaskets or joints:—Manhole _____ Handhole _____ Handhole plates _____

The foregoing is a correct description,
Foster Wheeler Corporation Manufacturer.
John S. Heck Vice Pres.
 Is the approved plan of boiler forwarded herewith _____
 Total No. of visits 3 AT NEW YORK

Dates of Survey } During progress of work in shops 1936 Dec 8, 28 1937 JAN 4
 while building } During erection on board vessel _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Fusion Welded Drum for the Exhaust Gas Fired Watertube Donkey Boiler of this vessel has been built under Special Survey in accordance with the Rules & approved plans & the workmanship & material are good. For particulars of tests, please see special report herewith. The Drum has been forwarded to DANVILLE N.J. to be fitted to the boiler, & when this has been done in accordance with the Rules & to the satisfaction of the Surveyor, it will be eligible, in my opinion, to receive the notation 1 WTDB 200LBS EXHAUST GAS FIRED ONLY

Survey Fee ... £ \$ 150.00 : } When applied for, 19th Feb. 1937 at Clevel.
 Travelling Expenses (if any) £ \$ 5.00 : } When received, See bill 815.
 FEE TO BE DIVIDED 50% CLEVELAND 50% N.Y.

Committee's Minute NEW YORK APR 28 1937
 Assigned See attached Rpt. P.H. 7272
 John S. Heck
 Engineer Surveyor to Lloyd's Register of Shipping.

