

REPORT ON WATER TUBE BOILERS.

No. 42698

25 JAN 1943

Received at London Office

Date of writing Report. 19... When handed in at Local Office. 19... Port of **NEW YORK**

No. in Survey held at **CARTERET, N.J.** Date, First Survey **April 20th** Last Survey **June 26th, 1942**

Reg. Bk. on the **S/S "Gulf Maracaibo"** (Number of Visits **14**) {Gross Tons
Net Tons

Built at **Chester, Pa.** By whom built **Sun S.B. & D.D. Co. (Hull 233)** When built **1942**

Engines made at... By whom made... When made...

Boilers made at **Carteret, N.J.** By whom made **Foster Wheeler Corp. (FWB 710-11)** When made **1942**

Nominal Horse Power... Owners **Gulf Oil Co.** Port belonging to...

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel **Lukens Steel Co.**

Date of Approval of plan **June 25th, 1941** Number and Description or Type of Boilers **2 Foster Wheeler Water Tube Blrs. Working Pressure 500 lbs./Drums Tested by Hydraulic Pressure to 1000 lbs. Date of Test June 5 & 8, 1942**

No. of Certificate... Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **4857 sq. ft.**

Is forced draught fitted... Area of fire grate (coal) in each Boiler **Oil fired.** 3030 sq. ft. **3030 sq. ft. Economiser x 2 = 6060 for 2 blrs.**

No. and type of burners (oil) in each boiler... No. and description of safety valves on each boiler... Area of each set of valves per boiler {per rule - as fitted - Pressure to which they are adjusted -

Are they fitted with easing gear... 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... Height of boiler **20' 2 1/2"**

Width and Length **11' 8 1/4" x 17' 3/16"** Steam Drums:—Number in each boiler **One** Inside diameter **42"**

Thickness of plates **1-13/32"** Range of Tensile Strength **70,000 lbs. minimum** Are drum shell plates welded or flanged **Fusion Welded** If fusion welded, state name of welding firm **Foster Wheeler Corporation** Have all the requirements of the rules for Class I vessels been complied with **Yes** Description of riveting:—Cir. seams... long. seams...

Diameter of rivet holes in long. seams... Pitch of rivets... Thickness of straps **2 1/2"** Percentage strength of long. joint:—Plate... Rivet... Diameter of tube holes in drum **1-9/32" & 21/32"** Pitch of tube holes **2-1/4" & 2-3/4"**

Percentage strength of shell in way of tubes **48.7% & 54.8%** Steam Drum Heads or Ends:—Range of tensile strength **65,000 lbs. min.**

Thickness of plates **1 1/4"** Radius or how stayed **Ellipsoidal** Size of manhole or handhole **12" x 16"** Water Drums:—Number in each boiler **One** Inside Diameter **32"** Thickness of plates **1-1/16"** Range of tensile strength **70,000 lbs. min.** drum shell plates welded or flanged **Fusion Welded** If fusion welded, state name of welding firm **Foster Wheeler Corporation** Have all the requirements of the rules for Class I vessels been complied with **Yes** Description of riveting:—Cir. seams... long. seam...

Diameter of rivet holes in long. seams... Pitch of rivets... Thickness of straps... Percentage strength of long. joint:—Plate... Rivet... Diameter of tube holes in drum **19/32" & 2-1/32"** Pitch of tube holes **2 1/4" & 2-3/4" & 5.8"**

Percentage strength of drum shell in way of tubes **48.7% & 54.8%** Water Drum Heads or Ends:—Range of Tensile strength **65,000 lbs. min.**

Thickness of plates **1-1/32"** Radius or how stayed **Ellipsoidal** Size of manhole or handhole **12" x 16"**

Headers or Sections:—Number... Material... Thickness... Tested by Hydraulic Pressure to... Tubes:—Diameter **1 1/4" - 2" - 3"** Thickness **12 & 10 BWG resp.** Number **586** Steam Dome or Collector:—Description of joint to Shell... Inside diameter... Thickness of shell plates... Range of tensile strength... Description of longitudinal joint... If fusion welded, state name of welding firm... Have all the requirements of the rules for Class I vessels been complied with... Diameter of rivet holes... Pitch of rivets... Thickness of straps... Percentage strength of long. joint... Plate... Rivet...

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

SUPERHEATER. Drums or Headers:—Number in each boiler... Inside Diameter... Thickness... Material... Range of tensile strength... Are drum shell plates welded or flanged... If fusion welded, state name of welding firm... Have all the requirements of the rules for Class I vessels been complied with... Description of riveting:—Cir. seams... long. seams... Diameter of rivet holes in long. seams... Pitch of rivets... 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... Drum Heads or Ends:—Thickness... Range of tensile strength... Radius or how stayed... Size of manhole or handhole... Number, diameter, and thickness of tubes... 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. and description of Safety Valves... Area of each set of valves... Pressure to which they are adjusted... Is easing gear fitted

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

The foregoing is a correct description,

John J. Helis Manufacturer.

Dates of Survey } During progress of work in shops - - { Apr. 20, 24, 27, May 1, 5, 15, 19, 22, June 3, 12, 15, 19, 23 & 26, 1942 } the approved plan of boiler forwarded herewith VICE PRESIDENT FOSTER WHEELER CORPORATION
while } During erection on building } board vessel - - - } Total No. of visits

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **The fusion welded drums for these boilers have been built and tested in accordance with the above plans, and the Rules for fusion welded pressure vessels, and the materials and workmanship are good. For particulars of tests see attached test reports. The drums have been forwarded to Chester, Pennsylvania, and when these boilers have been completed and fitted on board in accordance with the Rules and to the satisfaction of the Society's Surveyors, the vessel will be eligible, in my opinion, to have the notation 2 WT(B) 500 lbs.**

Survey Fee **TO BE CHARGED AT PHILADELPHIA** When applied for, **20th Dec. 1942**
Travelling Expenses (if any) \$ **21.00** : } When received, 19...
(see Phil. Rpt. No. 8291)

Committee's Minute **NEW YORK DEC 16 1942**
Assigned **See First Entry Report attached**

