

REPORT ON WATER TUBE BOILERS.

No. 7418

FEB - 9 1938

Received at London Office

Date of writing Report 4th Jan 1938 When handed in at Local Office 6th Jan 1938 Port of Philadelphia

No. in Survey held at Chester Pa. Contract No Date, First Survey 2nd June Last Survey 21 Dec 1937

Reg. Bk. on the SS M Y. RHODE ISLAND. (Number of Visits 19) Tons { Gross 8562 Net 5070

Master Chester Pa Built at Chester Pa By whom built Fun Ship Bldg Co When built 1937

Engines made at Chester Pa By whom made " " " " When made "

Boilers made at Chester Pa By whom made Foster Wheeler Corporation When made "

Registered Horse Power 4800 Owners The Texas Co Port belonging to Wilmington Del.

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

(Letter for Record S) Date of Approval of plan 3 March 1937 Number and Description or Type of Boilers 1 Water tube Exhaust gas fired only Working Pressure 227 lb Tested by Hydraulic Pressure to 341 Date of Test 20 Sept

No. of Certificate 715 Can each boiler be worked separately Yes Total Heating Surface of Boilers 1872 sq ft

Is forced draught fitted No Area of fire grate (coal) in each Boiler 1.77 sq ft Total grate area of boilers in vessel including Main and Auxiliary 1.77 sq ft No. and type of burners (oil) in each boiler Exhaust gas fired No and description of safety valves on each boiler 2 Spring loaded Area of each valve 1.77 sq ft Pressure to which they are adjusted 227 lbs

Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork 30" Height of Boiler 10'-11 3/4" Width and Length 11 1/4' 9'10"-11"

Steam Drums: - Number in each boiler 1 Inside diameter 30" Material of plates Steel Thickness 7/16" Description of riveting: - Range of Tensile Strength 65-75000 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 90% allowed

Lap of plate or width of butt straps Best joint Thickness of straps - Percentage strength of long. joint: - Plate 90% allowed Rivet 58.4%

Diameter of tube holes in drum 2 1/32" Pitch of tube holes 4 7/8" 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) - Distance apart - Number and pitch of stays in each - Working pressure by rules 30" Rule

Steam Drum Heads or Ends: - Material Steel Thickness 9/16" 7/16" Radius or how stayed 30" Rule

Size of Manhole or Handhole 12" X 16" 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 None Thickness - Radius or how stayed - Size of manhole or handhole - Headers or Sections: - Number None Material of Stays - Material - Thickness - Tested by Hydraulic Pressure to - Working Pressure by Rules - Tubes: - Diameter 2" Area at smallest part - Area supported by each stay - Working Pressure by Rules - Thickness 170" Number 80 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 None Thickness - How stayed -

UPERHEATER. 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 -

This drum is numbered WHB 90 The foregoing is a correct description,

Manufacturer.

Dates of Survey } During progress of work in shops - - } MAY 3.6.10.14.18 April 2.5.8.12.16.19.22.26.29.1937. at N.Y. Aug 4th Danville Is the approved plan of boiler forwarded herewith Yes

while building } During erection on board vessel - - - } Sept 16. 20 Oct 18. Dec 21 1937 Total No. of visits 19

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The above boiler has been satisfactorily installed on board the vessel. Tested by hydraulic pressure to 341 lbs with satisfactory results. The safety valves have been adjusted under steam to 227 lb. In my opinion the boiler is eligible to receive the record of 2 WTDB 227 lbs. 1 WTDB (Exhaust Gas Fired) 227 lb.

Installation Fee \$25.00 Survey Fee 5.00 Travelling Expenses (Many) 5.00 When applied for, 7th Jan 1938 When received, 14th Jan 1938

Main fee charged at Cleveland W.D. Ham Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK JAN 28 1938

Assigned 1 WTDB (Exhaust Gas fired) 227 lbs

