

REPORT ON WATER TUBE BOILERS.

No. 7272

Received at London Office MAY 10 1937

Date of writing Report 14th April, 1937. When handed in at Local Office 15th April, 1937. Port of Philadelphia

No. in Survey held at Chester Pa Date, First Survey Feb 10th Last Survey March 4 1937

Reg. Bk. on the SS MV. TEXAS. SUN (Number of Visits 4) Tons Gross Net

Master 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 " By whom made " When made "

Registered Horse Power 5600 Owners Sun Oil Co Port belonging to Philadelphia

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

Letter for Record Date of Approval of plan Nov 18 1936 Number and Description or Type

Boilers 1 Air Storage Tank Working Pressure 600 Tested by Hydraulic Pressure to 1200 Date of Test March 4 1937

No. of Certificate 696 Can each boiler be worked separately Total Heating Surface of Boilers 12 cubic ft

Is forced draught fitted Area of fire grate (coal) in each Boiler Total grate area of boilers in vessel including

Main and Auxiliary No. and type of burners (oil) in each boiler No. and description of safety valves on

each boiler 1 Spring loaded Area of each valve 7854 Pressure to which they are adjusted 700 lbs

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 Width and Length

Steam Drums: Number in each boiler 1 Inside diameter 15" Material of plates Steel Thickness 1/2"

Range of Tensile Strength 55000 to 65000 Are drum shell plates welded or flanged Solid drum Description of riveting: -

Cir. seams Fusion Welded long. seams Solid drum Diameter of rivet holes in long. seams Pitch of Rivets

Thickness of plate 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 shell in way of tubes

Drum has a flat side state method of staying Depth and thickness of girders at centre

(if fitted) Distance apart Number and pitch of stays in each Working pressure

Rules Steam Drum Heads or Ends: Material Steel Thickness 5/8" Radius or how stayed 13" radius

Material of plates Water Drums: Number in each boiler Inside Diameter

Are drum shell plates welded 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

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

Rules Crown or End Plates: Material Thickness How stayed

SUPERHEATER. Type 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

Are Gear. Tubes Gaskets or joints: - Manhole Handhole Handhole plates

The foregoing is a correct description,

W. C. Conroy Manufacturer. SUN SHIPBUILDING & DRY DOCK CO.

Dates During progress of work in shops Feb 10, 24, 26, March 1, 2, 4 1937. Is the approved plan of tanks forwarded herewith Yes

While During erection on board vessel March 16 1937 Total No. of visits 7

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This tank has been constructed under special order, and in accordance with the approved plans, the workmanship & materials are good. After welding was completed, the tank was stress relieved, see separate report on welding. The tank was tested by rising the pressure 900 lbs, and beating with a 7 lbs. hammer, the pressure then increased to 1200 lbs found satisfactory. The tank has now been satisfactorily installed on board the vessel.

Survey Fee ... \$ 30 00 : When applied for, 20th April 1937

Travelling Expenses (if any) \$ 5 00 : When received, 10.6.37

W. A. Rankin Engineer Surveyor to Lloyd's Register of Shipping.

NEW YORK APR 28 1937

Committee's Minute Signed See First Entry Rpt. on Oil Eng.