

REPORT ON ~~WATER TUBE~~ BOILERS.

No. 7403

JAN 20 1938

Received at London Office

Date of writing Report 9 Dec 1937 When handed in at Local Office 10 Dec 1937 Port of Philadelphia
 No. in Survey held at Lechester Pa Date, First Survey 20 Sept Last Survey 27 Nov 1937
 Reg. Bk. on the S/S ESSO. BAYTOWN. (Number of Visits 2.) Gross 8021 Tons Net 4794
 Master Lechester Pa Built at Lechester Pa By whom built Sum Bros & Co When built 1937
 Engines made at Lechester Pa By whom made Westinghouse Electric Mfg Co When made "
 Boilers made at Barberton Ohio By whom made Barcock & Wilson When made "
 Registered Horse Power 3600 Owners Standard Oil Co of New Jersey Port belonging to Wilmington Del

WATER TUBE BOILERS ~~MAIN, AUXILIARY, OR DONKEY.~~ Manufacturers of Steel Lukens Steel Co
 (Letter for Record of Boilers) 1 air tank Date of Approval of plan 13 May 1937 Number and Description or Type
 No. of Certificate 711 Can each boiler be worked separately - Working Pressure 125 lb Tested by Hydraulic Pressure to 250 lb Date of Test 20 Sept 37
 Is forced draught fitted - Area of fire grate (coal) in each Boiler - Total Heating Surface of Boilers 27 sq ft
 Main and Auxiliary 1 Spring loaded No. and type of burners (oil) in each boiler - No and description of safety valves on each boiler - Area of each valve 78 sq Pressure to which they are adjusted 125 lb
 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 31 3/8" Material of plates Steel Thickness 7/16"
 Range of Tensile Strength 55-65,000 lb 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 90% Rivet -
 Diameter of tube holes in drum - Pitch of tube holes - Percentage strength of shell in way of tubes -
 If 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 by rules -
 Steam Drum Heads or Ends:—Material Steel Thickness 7/16" Radius or how stayed 30" Rad.
 Size of Manhole or Handhole 15" x 11" 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 -
 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 by 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 -
 Spare Gear. Tubes - Gaskets or joints:—Manhole - Handhole - Handhole plates -

The foregoing is a correct description,
 SUN SHIPBUILDING & DRY DOCK CO. W. McCunechuf Manufacturer.

Dates of Survey 20 Sept 1937. During progress of work in shops - Is the approved plan of boiler forwarded herewith Yes
27 Nov 1937. During erection on board vessel - Total No. of visits 2.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This air tank has been constructed in accordance with the approved plans. The workmanship & materials are good. The drum has been tested by raising the pressure 190 lbs & hammering same with a 7 lb hammer. afterwards raising pressure to 250 lb with satisfactory results. Radiographs of all joints examined found good. Welding report attached. The drum has been satisfactorily installed on board the vessel.

Survey Fee ... (See Hull Report) When applied for, 19.
 Travelling Expenses (if any) £ : When received, 19.

W. D. Cumham.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

NEW YORK JAN 5 - 1938

Assigned See Phl. Reports attached