

REPORT ON WATER TUBE BOILERS.

Received at London Office

Date of writing Report 30/7/19 59. When handed in at Local Office 19 Port of LONDON. No. in Survey held at LONDON. Date, First Survey 14/4/59. Last Survey 1/5/19 59. Reg. Bk. on the Tank Barge "BLACKBIRD C" (Number of Visits 2.) Tons Gross 140.99. Net 75.70. Built at Wivenhoe By whom built James W. Cook & Co. (Deptford), Id. When built 8/59. Engines made at By whom made J. Stone & Co., (Deptford), Id. No. 20328. When made 5-1959. Boilers made at LONDON. By whom made J. Stone & Co., (Deptford), Id. When made 5-1959. Nominal Horse Power Owners Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Babcock & Wilcox (U.S.A.)

Date of Approval of plan 28/11/57. Number and Description or Type of Boilers One - Stone - Vapor, 4616 type Working Pressure 300 lb./sq. Tested by Hydraulic Pressure to 600 lb./sq. Date of Test 1.5.59.

No. of Certificate None issued Can each boiler be worked separately - Total Heating Surface of Boilers 105 sq. ft.

Is forced draught fitted Yes, electric fan. Area of fire grate (coal) in each Boiler -

No. and type of burners (oil) in each boiler One - Vapor boiler type. No. and description of safety valves on each boiler Two, high lift, 1" dia. Area of each set of valve 2.42 sq. Pressure to which they are adjusted 75 lb./sq.

Are they fitted with easing gear Yes. 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 68". Width and Length 45" x 70".

Steam Drums:—Number in each boiler None. Inside diameter - Thickness of plates -

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 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 -

Working pressure by rules - Steam Drum Heads or Ends:—Range of tensile strength - Thickness of plates -

Radius or how stayed - Size of manhole or handhole - Working pressure by rules - Water Drums:—Number

in each boiler - Inside Diameter - Thickness of plates - Range of tensile strength - Are drum shell plates

welded or flanged - Description of riveting:—Cir. seams - long. seam - 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 - Working pressure by rules - Water Drum Heads or Ends:—Range of

Tensile strength - Thickness of plates - Radius or how stayed -

Size of manhole or handhole - Working pressure by rules - Headers or Sections:—Number -

Material - Thickness - Tested by Hydraulic Pressure to - Coils - Tubes:—Diameter 1.05", 1.05" & 1.313".

Thickness 120", 120" & 135". Number 3. Steam Separator:—Description of Joint to Shell -

Inside diameter 3.548". Thickness of shell plates .226". Range of tensile strength 23/30 tons /sq. 2/19/55

Description of longitudinal joint S.D. tube. Diameter of rivet holes - Pitch of rivets - Lap of plate or width of

butt straps - Thickness of straps - Percentage strength of long. joint - Plate - Rivet -

Working Pressure of shell by rules - Crown or End Plates:—Range of tensile strength -

Thickness - Radius or how stayed - Working pressure by rules -

SUPERHEATER. Drums or Headers:—Number in each boiler None. Inside Diameter -

Thickness - Material - 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 - Working pressure by rules - Drum Heads or Ends:—

Thickness - Range of tensile strength - Radius or how stayed - Size of manhole or handhole -

Working pressure by rules - 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 - J. STONE & COMPANY (DEPTFORD) LIMITED

This boiler supplying steam for cargo heating purposes only has been satisfactorily installed on board "Blackbird C" examined under working condition and safety valves & automatic equipment operate for working pressures of 60 lbs per sq. inch. The foregoing is a correct description.

Dates of Survey } During progress of work in shops - - } 14.4.59 & 1.5.59. L. Stone. Is the approved plan of boiler forwarded herewith

while building } During erection on board vessel - - - } Total No. of visits

Is this boiler a duplicate of a previous case Yes. If so, state vessel's name and report No. M.V. "IRVINGWOOD" Rpt. 137815.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The boiler has been constructed in accordance with the Rules, approved plans & Secretary's letters. The materials & workmanship are good. The boiler is considered suitable for installation in a classed vessel, provided the steam be not required for essential services.

Survey Fee ... £ - : - : - } When applied for, 10

Travelling Expenses (if any) £ - : - : - } When received, 10

Charged against Cert. D.65734.

Committee's Minute assigned See Rpt. 1.

JEB.

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

Lloyd's Register Foundation

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