

REPORT ON WATER TUBE BOILERS.

No. 6331

Received at London Office.

26th Sept. 44 When handed in at Local Office 26th Sept. 44 Port of Vancouver, B. C.
 No. in Survey held at Vancouver, B. C. Date, First Survey 27th April, 1944 Last Survey 14th September 19 44
 eg. Bk. on the Steel Single Screw Steamer "FORT EDMONTON" (Number of Visits 16) {Gross 7201.82
 Tons {Net 4007.16
 Built at Vancouver, B. C. By whom built Burrard Dry Dock Co. Ltd. When built 1944
 Engines made at Lachine, P.Q. By whom made Canadian Allis-Chalmers Co. Ltd. When made 1944
 Boilers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd. When made 1944
 Nominal Horse Power 628 Owners Minister of Munitions & Supply of Canada Port belonging to

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY—Manufacturers of Steel Steel Co. of Canada, Page-Hersey Tubes
 & Combustion Eng. Co., Chattanooga.
 Date of Approval of plan 17 - 7 - 43 Number and Description of Type
 Boilers 2 Simuous Header Watertube Working Pressure 250 lbs. (Spt. 230 lb.) Tested by Hydraulic Pressure to 425 lbs. Date of Test 4-5-44
 No. of Certificate 695 - 696 Can each boiler be worked separately Yes Total Heating Surface of Boilers 9704 sq. ft. (2 Blrs)
 Forced draught fitted Yes Area of fire grate (coal) in each Boiler - -
 No. and type of burners (oil) in each boiler 4 Todd "Hex - Press" Burners No. and description of safety valves on
 per boiler One Twin 4" spring loaded Area of each set of valves per boiler {per rule 22.9 sq. in. ex Spt 23.9 with 80%
 as fitted 25.14 " " + 1.76 Pressure to which they
 adjusted 250 lbs. Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter
 donkey boiler - - Smallest distance between boilers or uptakes and bunkers or woodwork 23" Height of boiler 16'-5-5/8
 Width and Length 14'-7 1/2" x 18'-7 1/2" Steam Drums:—Number in each boiler One Inside diameter 47 3/4"
 Thickness of plates 15/16" Range of Tensile Strength 70,000 to 82,000 lbs. Are drum shell plates welded
 flanged Welded If fusion welded, state name of welding firm Vancouver Iron Works, Ltd. Have all the requirements of the rules
 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 - - Percentage strength of
 long. joint:—Plate - - Rivet - - Diameter of tube holes in drum 4-1/32" Pitch of tube holes 7"
 Percentage strength of shell in way of tubes 42.5% Steam Drum Heads or Ends:—Range of tensile strength 65,000 to 77,000 lbs.
 Thickness of plates 15/16" Radius or how stayed 38" Size of manhole or handhole 12" x 16" Water Drums:—Number
 each boiler One Inside Diameter 5 1/2" sq. Thickness of plates 3/4" Range of tensile strength 60,000 - 70,000 lbs. Are drum shell plates
 welded or flanged Solid drawn If fusion welded, state name of welding firm - - Have all the requirements of the rules
 Class I vessels been complied with - - 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 4-1/32" Pitch of tube holes 7"
 Percentage strength of drum shell in way of tubes 42.5% Water Drum Heads or Ends:—Range of Tensile strength 60,000 to 70,000 lbs.
 Thickness of plates 9/16" min. Radius or how stayed Handholes in end Size of manhole or handhole 4 1/2" x 5 1/2"
 Headers or Sections:—Number 22 Material Steel Thickness 9/16" Tested by Hydraulic Pressure to 500 lbs.
 Tubes:—Diameter 2" & 4" Thickness 10 & 6 BWG (203" Number 602-2" 44-4" 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
 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 Two Inside Diameter 6" square
 Thickness 5/8" Material Steel Range of tensile strength 60,000 to 70,000 lbs. Are drum shell plates welded
 flanged Forged If fusion welded, state name of welding firm - - Have all the requirements of the rules
 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 2-1/64" Pitch of tube holes 3-3/4" Percentage strength of
 drum shell in way of tubes 46% Drum Heads or Ends: Welded to inlet and outlet nozzles. Thickness - - Range of tensile strength - -
 Radius or how stayed - - Size of manhole or handhole 4 1/2" x 5 1/2" Number, diameter, and thickness of tube 22 of 2" OD 10BWG
 Tested by Hydraulic Pressure to 425 lbs. Date of Test 4-5-44 5-5-44 Is a safety valve fitted to each section of the superheater which
 can be shut off from the boiler Yes No. and description of Safety Valves One Area of each set
 valves 1.76 sq. inches Pressure to which they are adjusted 230 lbs. Is easing gear fitted No
 Spare Gear Has the spare gear required by the rules been supplied Yes
 Note. Headers, Superheater headers and mud drums
 manufactured by Combustion Engineering Co. Inc.
 at Chattanooga, Tennessee, under Mobile
 Surveyors inspection and certificate.

The foregoing is a correct description,

VANCOUVER IRON WORKS LTD. Manufacturer.

Dates } During progress of } 1944 April 27 & 28 May 1, 2, 3, 4, 5 & 8 Is the approved plan of boiler forwarded herewith No
 Survey } work in shops - - Plans in U.K.
 while } During erection on } 1944 May 16 Aug. 26, 29 & 30 Sept. 5, 12, Total No. of visits 16
 building } board vessel - - 13 & 14

this boiler a duplicate of a previous case. Yes If so, state vessel's name and report No. "FORT COLUMBIA" (Ver. Report No. 5942)

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built and fitted on
 board under Special Survey in accordance with the approved plans, New York letters and the Rules.
 The workmanship is good and the materials tested as per Rule. Satisfactorily tested under hydraulic
 pressure as above, examined under working conditions, safety valves adjusted to the W.P. and a
 satisfactory accumulation test carried out. 14th Sept. 44

Survey Fee \$150.00 When applied for 19 44
 Travelling Expenses (if any) \$ 15.00 When received. 19

Committee's Minute

Assigned

8 DEC 1944

see minute
on 5th Sept.

Engine Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation