

# REPORT ON WATER TUBE BOILERS.

No. 6102

Received at London Office 17 APR 1944

of writing Report 14th Feb., 1944 When handed in at Local Office 14th Feb., 1944 Port of Vancouver, B. C.

o. in Survey held at Vancouver, B. C. Date, First Survey 15th Oct., 1943 Last Survey 11th Feb., 1944

g. Bk. on the Steel Single Screw Steamer "LOUISBOURG PARK" (Number of Visits 31) Tons { Gross 7160.33 Net 4244.61

at Vancouver, B. C. By whom built Burrard Dry Dock Co. Ltd. When built 1944

ines made at Lachine, P.Q. By whom made Canadian Allis-Chalmers Co. When made 1944

ers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd. When made 1944

linal Horse Power 628 Owners Minister of Munitions & Supply of Canada (Mgrs. Park Steamship Co. Ltd.) Part belonging to Montreal, P.Q.

ATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel Steel Co. of Canada, Page-Hersey Tubes, Combustion Eng. Co., Chattanooga.

of Approval of plan 17-7-43 Boilers 2 Sinuous Header Watertube Working Pressure 250 lbs (Spt. 230 lb.) Tested by Hydraulic Pressure to 425 lbs. Date of Test 22-10-43 NN

of Certificate Nos. 597 & 599 Can each boiler be worked separately Yes Total Heating Surface of Boilers 9704 sq. ft. (2 Birs.) 26-10-43 NN

forced draught fitted Yes Area of fire grate (coal) in each boiler 4 Todd "Hex - Press" Burners No. and description of safety valves on boiler One Twin 4" spring loaded Area of each set of valves per boiler { per rule 22.9 sq. in. as fitted 25.14 " " Pressure to which they are 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

th and Length 14'-7 1/2" x 18'-7 1/2" Steam Drums:—Number in each boiler One Inside diameter 47 3/8" 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 --

meter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps -- Percentage strength of 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 3/4" sq. Thickness of plates 3/4" Range of tensile strength 60,000-70,000 lbs. 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 --

meter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps -- Percentage strength of 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"

iders or Sections:—Number 22 Material Steel Thickness 9/16" Tested by Hydraulic Pressure to 500 lbs. Pipes:—Diameter 2" & 4" Thickness 10&6 BWG .134" Number 602-2". 44-4" Steam Dome or Collector:—Description of to Shell -- Inside diameter -- Thickness of shell plates -- Range of tensile strength -- Description of longitudinal joint -- If fusion welded, state name of welding firm -- Have all the requirements of the rules for Class I vessels been complied with -- Diameter of rivet holes --

Number of rivets -- Thickness of straps -- Percentage strength of long. joint -- Plate -- Rivet --

own or End Plates:—Range of tensile strength -- Thickness -- Radius or how stayed --

UPERHEATER. 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 --

meter of rivet holes in long. seams -- Pitch of rivets -- Thickness of straps -- Percentage strength of joint:—Plate -- Rivet -- Diameter of tube holes in drum 2-1/64" Pitch of tube holes 3-3/4" Percentage strength of shell in way of tubes 46% Drum Heads or Ends: Welded to inlet and outlet nozzles. 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 tubes 22 off 2" OD 10BWG .134 wall. Tested by Hydraulic Pressure to 425 lbs. Date of Test 22-10-43 & 26-10-43 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 of valves 1.76 sq. inches Pressure to which they are adjusted 230 lbs. Is easing gear fitted No

are Gear. Has the spare gear required by the rules been supplied Yes

Notes:— Headers, Superheater headers and mud drums manufactured by Combustion Engineering Co. Inc. at Chattanooga, Tennessee, under American Bureau Inspection. The foregoing is a correct description. VANCOUVER IRON WORKS LTD. Manufacturer.

ates During progress of survey work in shops 1943. Oct. 15, 16, 20, 21, 22, 23, 26, 27, 28. Is the approved plan of boiler forwarded herewith No Plans in U.K. During erection on board vessel 1943. Dec. 15, 22, 28. 1944. Jan. 3, 8, 10, 1944. Jan. 12, 13, 14, 15, 19, 21, 26, 27, 28, 29. Total No. of visits 31

is boiler a duplicate of a previous case Yes If so, state vessel's name and report No. "FORT COLUMBIA" (Vcr. 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.

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.

Survey Fee £150.00 When applied for 11th. Feb. 1944 Travelling Expenses (if any) £15.00 When received, 19

Committee's Minute THURS 27 APR 1944

signed [Signature]

