

REPORT ON WATER TUBE BOILERS.

No. 5956

Received at London Office

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Date of writing Report: **7th Sept., 1943** When handed in at Local Office: **7th Sept., 1943** Port of: **Vancouver, B. C.**
 No. in Survey held at: **Vancouver, B. C.** Date, First Survey: **8th June, 1943** Last Survey: **28th August, 1943**
 Name of vessel: **Steel Single Screw Steamer "WASCANA PARK"** (Number of Visits: **34**) Tons { Gross: **7152.20**
 Net: **4239.68**
 Built at: **Vancouver, B. C.** By whom built: **Burrard Dry Dock Co. Ltd.** When built: **1943**
 Engines made at: **Toronto** By whom made: **John Inglis Co. Ltd.** When made: **1943**
 Boilers made at: **Vancouver, B. C.** By whom made: **Vancouver Iron Works, Ltd.** When made: **1943**
 Indicated Horse Power: **636** 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.**

Date of Approval of plan: **17-7-43** Number and Description or Type: **(Two) Sinuous Header Water Tube**
 Working Pressure: **250 lbs.** Tested by Hydraulic Pressure to: **425 lbs.** Date of Test: **16-6-43**
 No. of Certificate: **Nos. 489 & 490** 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
 each boiler: **One Iron 4" Consolidated** Area of each set of valves per boiler { per rule: **22.9 sq. ins.**
 as fitted: **25.14 sq. ins.** 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"**
 Width and Length: **14' x 7' 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
 for 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: **38"** Size of manhole or handhole: **12" x 16"** Water Drums:—Number
 in each boiler: **One** Inside diameter: **5-3/4"** Thickness of plates: **3/4"** Range of tensile strength: **60,000 - 70,000 lbs.**
 Welded or flanged: **Solid Drawn** If fusion welded, state name of welding firm: **--** Have all the requirements of the rules
 for 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" x 4"** Thickness: **10.6 BWG (.134")** 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
 firm: **--** 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: **--**

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
 for 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 & 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: **16-6-43** 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**

Spare Gear. Has the spare gear required by the rules been supplied: **Yes**
 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.

Dates of Survey: During progress of work in shops: **1943, June 8, 9, 10, 11, 12, 15, 16, 18, 19.** Is the approved plan of boiler forwarded herewith: **No**
 During erection on board vessel: **1943, June 27, July 13, 19, 20, 28, 31.** Total No. of visits: **34** Plans in U.K.: **--**
 Aug. 2, 4, 5, 6, 10, 11, 13, 14, 16, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28.

Is this boiler a duplicate of a previous case: **Yes** If so, state vessel's name and report No.: **"FORT COLUMBIA" (Ver. Rpt. 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.** 31st Aug. 1943

Survey Fee: **\$150.00** When applied for: **31st Aug. 1943**
 Travelling Expenses (if any): **\$15.00** When received: **19**

Committee's Minute assigned: **See fe machy rpl.**
TUES. 21 DEC 1943
W. P. Baillie
 Engineer Surveyor to Lloyd's Register of Shipping.

