

REPORT ON WATER TUBE BOILERS.

No. 5999

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Writing Report **Oct. 7, 1943** When handed in at Local Office **Oct. 7, 1943** Port of **Vancouver, B.C.**
 in Survey held at **Vancouver, B.C.** Date, First Survey **Aug. 3, 1943** Last Survey **Oct. 2, 1943**
 on the **Steel Single Screw Steamer S.S. "FORT LA BAYE"** (Number of Visits **11**) { Gross **7161.66**
 Tons { Net **4247.85**
 made at **Vancouver, B.C.** By whom built **West Coast Shipbuilders Ltd.** When built **1943**
 made at **Montreal, P.Q.** By whom made **Dominion Engineering Works Ltd.** When made **1943**
 made at **Vancouver, B.C.** By whom made **Vancouver Iron Works Ltd.** When made **1943**
 Horse Power **636** Owners **Minister of Munitions & Supply of Canada.** Port belonging to **--**

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel **Steel Company of Canada Page-Hersey Tubes**

Approval of plan **17/7/43.** Number and Description or Type
 Boilers **2. Sinuous Header Watertube.** Working Pressure **250 lbs.** Tested by Hydraulic Pressure to **425 lbs.** Date of Test **3-8-43.**
 Certificate **541 & 542** Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **9704 sq.ft.**
 Draught fitted **Yes** Area of fire grate (coal) in each Boiler **--**
 Type of burners (oil) in each boiler **4. Todd "Hex-Press" Burners**
 Boiler **One Twin 4" Consolidated** Area of each set of valves per boiler { per rule **22.9 sq. in.** No. and description of safety valves on
 as fitted **25.14 sq. in.** Pressure to which they **23.9 with 450' F**
 Tested **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"**
 Length **14"-7 3/4" 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
 Welded **Yes** 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
 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
 Boiler **One** Inside Diameter **5 3/4" sq.** Thickness of plates **3/4"** Range of tensile strength **60,000-70,000 lbs.** Are drum shell plates
 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" Minimum** Radius or how stayed **Handholes in end** Size of manhole or handhole **4 1/2" x 5 1/2"**
 Sections:—Number **22** Material **Steel** Thickness **9/16"** Tested by Hydraulic Pressure to **500 lbs.**
 Diameter **2" & 4"** Thickness **10 & 6 BWG (.134")** Number **602-2"** **44-4"** Steam Dome or Collector:—Description of
 Shell **--** Inside diameter **--** Thickness of shell plates **--** Range of tensile
 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 **--**
 Thickness of straps **--** Percentage strength of long. joint **--** Plate **--** Rivet **--**
 Range of tensile strength **--** Thickness **--** Radius or how stayed **--**
 ERHEATER. Drums or Headers:—Number in each boiler **Two** Inside Diameter **6" square**
 Material **Steel** Range of tensile strength **60,000 to 70,000 lbs.** Are drum shell plates welded
 Forged **Yes** 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
 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 & 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 tubes **22 off 2" OD 10 BWG .134 Wall**
 Tested by Hydraulic Pressure to **425 lbs.** Date of Test **3-8-43.** Is a safety valve fitted to each section of the superheater which
 shut off from the boiler **Yes** No. and description of Safety Valves **One** Area of each set
 of valves **1.76 sq. in.** Pressure to which they are adjusted **230 lbs.** Is easing gear fitted **No**
 Gear. Has the spare gear required by the rules been supplied **Yes**
 Headers, Superheater headers and mud drums manufactured **The foregoing is a correct description.**
Dominion Engineering Co. Inc. at Chattanooga, Tennessee, **VANCOUVER IRON WORKS LTD.** Manufacturer.
American Bureau Inspection.

During progress of work in shops **Aug.- 3 & 5.** Is the approved plan of boiler forwarded herewith **No**
 During erection on board vessel **Aug.- 5, 12, 17. Sept.- 11, 20, 22, 28.** Total No. of visits **11** Plans in U.K.
 Oct.- 1 & 2.

boiler a duplicate of a previous case **Yes** If so, state vessel's name and report No. **Fort Columbia, Vanc. Rpt. No. 5942.**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **These boilers have been built and fitted on
 and 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 satis-
 factory accumulation test carried out.**

Survey Fee **\$ 150.00 :** When applied for, **Oct. 6, 1943.**
 Travelling Expenses (if any) **\$ 15.00 :** When received, **19**

Committee's Minute **See for machinery etc.**
 signed **R. Knox**
 Engineer Surveyor to Lloyd's Register of Shipping.

