

REPORT ON WATER TUBE BOILERS.

No. 5949

Received at London Office

Date of writing Report **23rd Aug., 1943** When handed in at Local Office **23rd Aug., 1943** Port of **Vancouver, B. C.**

No. in Survey held at **Vancouver, B. C.** Date, First Survey **12th May, 1943** Last Survey **10th July, 1943**

eg. Bk. on the **Steel Single Screw Steamer "FORT ASTORIA"** (Number of Visits **21**) Tons {Gross **7188.56**
Net **4241.65**

built at **Vancouver, B.C.** By whom built **West Coast Shipbuilders, Ltd.** When built **1943**

engines made at **Montreal, P.Q.** By whom made **Canadian Allis-Chalmers, Ltd.** When made **1943**

boilers made at **Vancouver, B. C.** By whom made **Vancouver Iron Works, Ltd.** When made **1943**

nominal Horse Power **636 663** 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

Boilers **2 Sinuous Header Water Tube** Working Pressure **250 lbs.** Tested by Hydraulic Pressure to **425 lbs.** Date of Test **7-6-43**

No. of Certificate **Nos. 471 & 472** Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **9704 (2 Blrs.)**

forced draught fitted **Yes** Area of fire grate (coal) in each Boiler **--**

and type of burners (oil) in each boiler **4 Todd "Hex-Press" Burners**

No. and description of safety valves on boiler **One Twin 4" Consolidated** Area of each set of valves per boiler {per rule **22.9 sq. ins.** *Ordinary except.*
as fitted **25.14 sq. ins.** + 1.76 = 26.9

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 **47-3/8"**

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 **--**

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

each boiler **One** Inside Diameter **5 1/2" Sq.** Thickness of plates **3/4"** Range of tensile strength **60,000 to 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" x 4"** Thickness **10#6BWG (1.34")** 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 **--**

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

Down 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 & 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**

Tested by Hydraulic Pressure to **425 lbs.** Date of Test **7-6-43** 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

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 **American Bureau Inspection.**

The foregoing is a correct description,

J. D. Brown Manufacturer.

This boiler a duplicate of a previous case **Yes** If so, state vessel's name and report No. **S.S. "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**

ward 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

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 **30th Aug. 1943**

Travelling Expenses (if any) **£\$ 15.00** : } When received, **19**

Committee's Minute **TUES. 7 DEC 1943**

Assigned *See file made up.*



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