

# REPORT ON WATER TUBE BOILERS.

No. 6306

Received at London Office.

2 NOV 1944

of writing Report. **25th Aug., 44** When handed in at Local Office **25th Aug., 19 44** Port of **Vancouver, B. C.**  
 in Survey held at **Vancouver, B. C.** Date, First Survey **26th May, 1944** Last Survey **18th August, 19 44**  
 Bk. on the **Steel Single Screw Steamer "RICHMOND PARK"** (Number of Visits **15**) Tons { Gross **7163.10**  
 at **North Vancouver, B. C.** By whom built **North Van Ship Repairs, Ltd.** When built **1944**  
 nes made at **Lachine, P.Q.** By whom made **Canadian Allis-Chalmers, Ltd.** When made **1944**  
 rs made at **Vancouver, B. C.** By whom made **Vancouver Iron Works, Ltd.** When made **1944**  
 .44 inal Horse Power. **628** Owners **Minister of Munitions & Supply of Canada. (Mgers. - Park Steamship Co. Ltd., Montreal, P.Q.)**

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

of Approval of plan **17-7-43** (Spt. 230 lb.) Number and Description or Type  
 Boilers **2 Sinuous Header Watertube** Working Pressure **250 lbs.** Tested by Hydraulic Pressure to **425 lbs.** Date of Test **6-6-44 & 7-6-44.**  
 of Certificate **Nos. 711 & 712** Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **9704 sq. ft. (2 Birs.)**  
 rced 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" spring loaded** Area of each set of valves per boiler { per rule **22.9 sq. in.**  
 as fitted **25.14 " "** 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  
 26. Monkey boiler **--** Smallest distance between boilers or uptakes and bunkers or woodwork **23"** Height of boiler **16'-5-5/8**

th and Length **14'-7 3/4" x 18'-7 1/2"** Steam Drums:—Number in each boiler **One** Inside diameter **47 3/8"**  
 kness of plates **15/16"** Range of Tensile Strength **70,000 to 82,000 lbs.** Are drum shell plates welded  
 langed **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"**  
 entage strength of shell in way of tubes **42.5%** Steam Drum Heads or Ends:—Range of tensile strength **65,000 to 77,000 lbs.**

kness of plates **15/16"** Radius or how stayed **38"** Size of manhole or handhole **12" x 16"** Water Drums:—Number  
 ach boiler **One** Inside Diameter **5 3/4" sq.** Thickness of plates **3/4"** Range of tensile strength **60,000 - 70,000 lbs.**  
 led 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 **--**

meter of rivet holes in long. seams **--** Pitch of rivets **--** Thickness of straps **--**  
 entage strength of long. joint:—Plate **--** Rivet **--** Diameter of tube holes in drum **4-1/32"** Pitch of tube holes **7"**  
 entage 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.**

ckness of plates **9/16" min.** Radius or how stayed **Handholes in end** Size of manhole or handhole **4 1/2" x 5 1/2"**  
 aders or Sections:—Number **22** Material **Steel** Thickness **9/16"** Tested by Hydraulic Pressure to **500 lbs.**  
 bes:—Diameter **2" & 4"** Thickness **10&6 BWG (.134" & .203")** Number **602-2". 44-4"** Steam Dome or Collector:—Description of

ut to Shell **--** Inside diameter **--** Thickness of shell plates **--** Range of tensile  
 ngth **--** 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 **--**  
 b 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 **--**  
 PERHEATER. Drums or Headers:—Number in each boiler **Two** Inside Diameter **6" square**  
 ckness **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  
 g. joint:—Plate **--** Rivet **--** Diameter of tube holes in drum **2-1/64"** Pitch of tube holes **3-3/4"** Percentage strength of  
 m shell in way of tubes **46%** Drum Heads or Ends: **Welded to inlet and outlet nozzles.** Range of tensile strength **--**

lius or how stayed **--** Size of manhole or handhole **S. 4 1/2" x 5 1/2"** Number, diameter, and thickness of tubes **22 off 2" OD 10BWG .134 wall.**  
 ted by Hydraulic Pressure to **425 lbs.** Date of Test **6-6-44 & 7-6-44.** Is a safety valve fitted to each section of the superheater which  
 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**

pare Gear. Has the spare gear required by the rules been supplied **Yes**  
 te: 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. May 26, 29, 30, 31.**  
 Survey { work in shops - - { **June 2, 3, 6, 7, 8.**  
 while { During erection on {  
 building { board vessel - - - { **1944. Aug. 4, 8, 10, 11, 12, 18.**

Is the approved plan of boiler forwarded herewith **No**  
**Plans in U.K.**  
 Total No. of visits **15**

this 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.**  
**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, 21<sup>st</sup> Aug, 1944**

Survey Fee **\$150.00** When applied for **21<sup>st</sup> Aug, 1944**  
 Travelling Expenses (if any) **\$ 15.00** When received, **19**

ommittee's Minute

ssigned

FRI. 10 NOV 1944

see minute  
 on P.E. Rpt.

**R. R. Moore**, J. Caldwell  
 Engineer Surveyor to Lloyd's Register of Shipping.

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