

REPORT ON WATER TUBE BOILERS.

No. 6279

Received at London Office

27 SEP 1944

25th July, 1944 When handed in at Local Office 25th July, 1944 Port of Vancouver, B. C.
Survey held at North Vancouver, B. C. Date, First Survey 2nd May, 1944 Last Survey 24th July, 1944
on the Steel Single Screw Steamer "YOHO PARK" (Number of Visits 17) {Gross 7163.61
Tons {Net 4220.33
At North Vancouver, B. C. By whom built North Van Ship Repairs, Ltd. When built 1944
Lines made at Montreal By whom made Canadian Allis-Chalmers, Ltd. When made 1944
Boilers made at Vancouver, B. C. By whom made Vancouver Iron Works, Ltd. When made 1944
Nominal Horse Power 628 Owners: Minister of Munitions & Supply of Canada. (Mfrs. - Park Steamship Co. Ltd., Montreal, P.Q.)

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel Steel Co. of Canada, Page-Hersey Tubes, Combustion Eng. Co., Chattanooga.
Date of Approval of plan 17-7-43 Number and Description or Type
Boilers 2 Sinuous Header Watertube Working Pressure 250 lbs. (Spt. 230 lb.) Tested by Hydraulic Pressure to 425 lbs. Date of Test 11-5-44 & 12-5-44.
Nos. 699 & 700 Can each boiler be worked separately. Yes Total Heating Surface of Boilers 9704 sq. ft. (2 Birs.)
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" 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
Diameter and 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
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 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. Are drum shell plates
Flanged 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"
Readers or Sections:—Number 22 Material Steel Thickness 9/16" Tested by Hydraulic Pressure to 500 lbs.
Bores:—Diameter 2" & 4" Thickness 10&6 BWG { .134" .203" Number 602-2". 44-4". Steam Dome or Collector:—Description of
Diameter to Shell -- Inside diameter -- Thickness of shell plates -- Range of tensile
Length -- 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 --
Pitch of rivets -- 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 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
Tested by Hydraulic Pressure to 425 lbs. Date of Test 11-5-44 and 12-5-44 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

Are 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 Mobile Surveyors inspection and certificate.

The foregoing is a correct description,
VANCOUVER IRON WORKS LTD.

Manufacturer.

Dates of Survey During progress of work in shops - 1944. May 2,3,5,8,9,11,12,13. Is the approved plan of boiler forwarded herewith No
During erection on board vessel - 1944. July 6,10,11,12,14,15,17,21,24. Plans in U.K.
Total No. of visits 17

Is 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. 24th July 1944

Survey Fee \$150.00 : When applied for, 24th July 1944
Travelling Expenses (if any) \$ 15.00 : When received, 19

Committee's Minute

Signed

TUES. 3 OCT 1944

see minute on J.E. Rpt

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register

005089-005097-0086