

Rpt. 5a.  
Rpt. 5a.

# REPORT ON BOILERS.

mal Rpt  
No. 6104

23 JUN 1944

Date of writing Report Feb. 25, 1944 When handed in at Local Office Dec. 6, 1943 Port of Montreal, Que.

No. in Reg. Book. Survey held at Montreal, Que.

Date, First Survey Oct. 5th, 1943 Last Survey Nov. 11, 1943

on the S.S. BERESFORD PARK.

(Number of Visits 11)

Tons { Gross  
Net

Built at Pictou, N.S. By whom built Foundation Maritime Limited Yard No. 11

Engines made at

By whom made

Engine No. When made

Boilers made at Lachine, P.Q.

By whom made Dominion Bridge Company Limited

Boiler No. B1147 When made 1943

Nominal Horse Power

Owners

Port belonging to

## MULTITUBULAR BOILERS—MAIN, ~~ADJUTANT GENERAL DONKEY~~

Manufacturers of Steel Bethlehem, Steel Co. of Canada, Lukens, etc.

Total Heating Surface of Boilers 1927 sq. ft.

Is forced draught fitted Yes

(Letter for Record S)

No. and Description of Boilers 1 Single Ended Multitubular

Coal or Oil fired Coal

Tested by hydraulic pressure to 350 lbs./sq. in. Date of test 11.11.43 No. of Certificate 7454

Working Pressure 200 lbs./sq. in.

Area of Firegrate in each Boiler 43.25 sq. ft.

No. and Description of safety valves to each boiler One Twin Cockburn Improved High Lift 2 1/2" dia. each

Area of each set of valves per boiler { per Rule 6.72 sq. in. as fitted 7.95 sq. in.

Pressure to which they are adjusted

Are they fitted with easing gear Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ---

Smallest distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Largest internal dia. of boilers 13' - 6"

Length 11' - 6"

Shell plates: Material O.H. Steel Tensile strength 29-33 tons

Thickness 1 9/32"

Are the shell plates welded or flanged Welded

Description of riveting: circ. seams { end  
inter Welded

long. seams Welded

Diameter of rivet holes in { circ. seams  
long. seams

Pitch of rivets

Percentage of strength of circ. end seams { plate  
rivets

Percentage of strength of circ. intermediate seam { plate  
rivets

Percentage of strength of longitudinal joint { plate  
rivets

Working pressure of shell by Rules 204.3 lbs./sq. in.

Thickness of butt straps { outer None  
inner None

No. and Description of Furnaces in each Boiler 3 Morrison Corrugated

Material O.H. Steel

Tensile strength 26-30 tons

Smallest outside diameter 38 1/2" Sole size 4 1/2"

Length of plain part { top  
bottom

Thickness of plates { crown 9/16"  
bottom

Description of longitudinal joint Lap Weld

Dimensions of stiffening rings on furnace or c.c. bottom ---

Working pressure of furnace by Rules 212 lbs./sq. in.

End plates in steam space: Material O.H. Steel

Tensile strength 26-30 tons

Thickness 1 3/16" Pitch of stays 18 1/2" x 17 1/2"

How are stays secured Inside and Outside Nuts

Tube plates: Material { front O.H. Steel  
back O.H. Steel

Tensile strength { 26-30 tons  
26-30 tons

Working pressure by Rules 202.4 lbs./sq. in.

Thickness { 29/32"  
13/16"

Mean pitch of stay tubes in nests 8 3/8" x 10 5/16"

Pitch across wide water spaces 14"

Working Pressure { front 245 lbs./sq. in.  
back 223 lbs./sq. in.

Girders to combustion chamber tops: Material O.H. Steel

Tensile strength 28-32 tons

Depth and thickness of girder

at centre 2 @ 7 1/2" x 7/8"

Length as per Rule 33 15/32"

Distance apart 8"

in each 2 @ 10 1/2" x 8"

Working pressure by Rules 206.2 lbs./sq. in.

Combustion chamber plates: Material O.H. Steel

Tensile strength 26-30 tons

Thickness: Sides 23/32"

Back 23/32"

Top 23/32"

Bottom 23/32"

Pitch of stays to ditto: Sides 11" x 7 1/2"

Back 8 3/8" x 10 1/2"

Top 10 3/8" x 8" Are stays fitted with nuts or riveted over & welded over

Working pressure by Rules 202 lbs./sq. in.

Front plate at bottom: Material O.H. Steel

Tensile strength 26-30 tons

Thickness 29/32"

Lower back plate: Material O.H. Steel

Tensile strength 26-30 tons

Thickness 29/32"

Pitch of stays at wide water space 14 3/8" x 10 1/2"

Are stays fitted with nuts or riveted over Welded washers & welded over

Working pressure 214 lbs./sq. in.

Main stays: Material O.H. Steel

Tensile strength 28-32 tons

Diameter { At body of stay 3"  
or  
Over threads ---

No. of threads per inch 6

Area supported by each stay 18 1/2" x 17 1/2" = 324 sq. in.

Working pressure by Rules 207 lbs./sq. in.

Screw stays: Material O.H. Steel

Tensile strength 26-30 tons

Diameter { At turned off part 2" & 1 1/2"  
or  
Over threads ---

No. of threads per inch 9

Area supported by each stay 8 3/8" x 10 1/2" = 87.5/sq. in.

012446 - 012459 - 0110

Lloyd's Register  
Foundation



Working pressure by Rules 207 lbs./sq. in. Are the stays drilled at the outer ends No Margin stays: Diameter 2"  
No. of threads per inch 9 Area supported by each stay 11 3/8" x 10 1/2" = 119.5 sq. in. Working pressure by Rules 207 lbs./sq. in.  
Tubes: Material Steel External diameter 3 Thickness 5/16" & 1/4" No. of threads per inch 9  
Pitch of tubes 4 1/8" x 4 3/16" Working pressure by Rules 250 lbs./sq. in. Manhole compensation: Size of opening in  
shell plate -- Section of compensating ring -- No. of rivets and diameter of rivet holes --  
Outer row rivet pitch at ends -- Depth of flange if manhole flanged -- Steam Dome: Material --  
Tensile strength -- Thickness of shell -- Description of longitudinal joint --  
Diameter of rivet holes -- Pitch of rivets -- Percentage of strength of joint --  
Internal diameter -- Working pressure by Rules -- Thickness of crown -- No. and diameter of  
stays -- Inner radius of crown -- Working pressure by Rules --  
How connected to shell -- Size of doubling plate under dome -- Diameter of rivet holes and pitch  
of rivets in outer row in dome connection to shell --

Type of Superheater Smoke Tube

Number of elements 48 Material of tubes O.H. Seamless Manufacturers of National Tube Co.  
Material of headers O.H. Seamless Tube Tensile strength A.S.T.M. Spec 192-40 Internal diameter and thickness of tubes .69 & .095  
the boiler be worked separately Yes Is a safety valve fitted to every part of the superheater which can be shut off from the boiler Yes  
Area of each safety valve 1.77 sq. in. Are the safety valves fitted with easing gear Yes Working pressure as per  
Rules 200 lb. Pressure to which the safety valves are adjusted 205 lb. Hydraulic test pressure:  
tubes 250 lb. forgings and castings 250 lb. and after assembly in place 200 Are drain cocks or  
valves fitted to free the superheater from water where necessary Yes

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes

See Hpx letter 28.8.44.

The foregoing is a correct description,

DOMINION BRIDGE CO. LIMITED Manufacturer.

Dates of Survey Oct. 5, 7, 13, 19, 21, 26, 28,  
while building Nov. 1, 2, 9, 11

Are the approved plans of boiler and superheater forwarded herewith  
(If not state date of approval.)

Total No. of visits --

Is this Boiler a duplicate of a previous case Yes

If so, state Vessel's name and Report No. "ROCKWOOD PARK" Montreal Rpt. 5740

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This BOILER has been constructed under Special Survey and in accordance with Approved Plans.

The shell longitudinal and circumferential seams are welded by the Union Melt Process and have been tested and X-rayed in accordance with the Rules for Class 1 Pressure Vessels.

The longitudinal seams of the front and back end plates are welded by the Union Melt Process.

The Boiler was tested hydrostatically at 350 lbs. per sq. in. pressure and found tight.

Survey Fee 100.00

Travelling Expenses (if any) 10.50

When applied for Mch. 17 1944

When received 19

Weyl P. D. S.  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute --

THURS 29 JUN 1944

Assigned --

see minute on Hpx 28.8.44



© 2021

Lloyd's Register Foundation