

# REPORT ON BOILERS.

No. 5893

mal. Rpt.

pt. 5a.

Rpt. 5a

Received at London Office 19 AUG 1942

June 22/43

Oct. 15th 42

When handed in at London Office 19

Port of

MONTREAL, QUE.

5th June 42

7th May, 1942

20th May 43

30th Sept. 1942

43

1942

Survey held at MONTREAL, QUE.

Date, First Survey

Last Survey

(Number of Visits) 21

Gross 2861.47

Net 1658.00

on the S. S. "LANSDOWNE PARK"

built at LAUZON, LEVIS, P.Q.

By whom built GEO. T. DAVIE & SONS LIMITED

Yard No. 14

When built 1942

engines made at MONTREAL, P.Q.

By whom made Dominion Bridge Co. Ltd.

Engine No. 2002

When made 1942

boilers made at MONTREAL, P.Q.

By whom made Dominion Bridge Co. Ltd.

Boiler No. S1 B1042 P2

When made 1942

nominal Horse Power 268.81

Owners Park Steamship Co. Limited

Port belonging to Montreal

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Bethlehem Steel Co.; Steel Co. of Canada; Trenton Steel Co.; Dom. Foundries & Steel (Letter for Record S)

Total Heating Surface of Boilers 2 Boilers 3854 per square feet Is forced draught fitted Yes Coal or Oil fired Coal

and Description of Boilers 2 Multitubular Scotch Boilers (Single Ended) Working Pressure 200 lbs. per sq. inch

tested by hydraulic pressure to 350 lbs. per sq. in. Date of test 30.9.42 No. of Certificate 4573, 4574 Can each boiler be worked separately Yes

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" each

area of each set of valves per boiler { per Rule 6.72 sq. in. as fitted 7.952 sq. in. Pressure to which they are adjusted 200 lbs. per sq. in. 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 2'-1 1/2" Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 2'-0" Is the bottom of the boiler insulated Yes

Smallest internal diameter 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 flanged No Description of riveting: circ. seams { end Welded (Union Melt) inter. - -

circ. seams Welded (Union Melt) 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 - - combined - -

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 3'-5-5/8"

Length of plain part { top - - bottom - - Thickness of plates { crown 9/16 Description of longitudinal joint Lap weld -

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

Stays in steam space: Material O H Steel Tensile strength 26-30 tons Thickness 1-3/16" Pitch of stays 17 1/2" x 18 1/2"

Are stays secured Inside and Outside Nuts -

End plates: Material { front O H Steel Tensile strength 26-30 tons Thickness 29/32" { back O H Steel Tensile strength 26-30 tons Thickness 13/16"

Pitch of stay tubes in nests 10-3/8" Pitch across wide water spaces 14" x 8 1/2"

Boilers to combustion chamber tops: Material O H Steel Tensile strength 28-32 tons Depth and Thickness of girder

Centre 7 1/2" x 7/8" Length as per Rule 2' - 9-15/32" Distance apart 8" centre to centre No. and pitch of stays

Chamber 2 - 10 3/4" 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 3/4" x 8" Are stays fitted with nuts or riveted over Welded washers & welded over -

End 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"

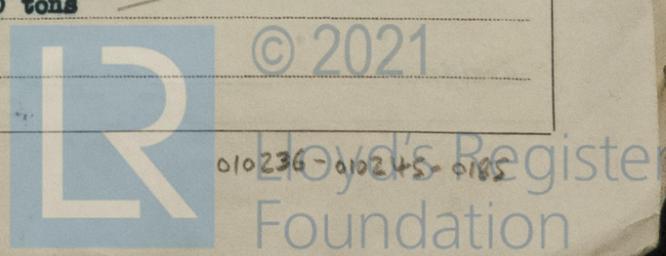
Pitch of stays at wide water space 14-3/8" x 10 1/2" Are stays fitted with nuts or riveted over Welded washers & welded over

Shipping stays: Material O H Steel Tensile strength 28-32 tons

At body of stay or Over threads 3 1/2" and 2 1/2" No. of threads per inch 6

Wide stays: Material O H Steel Tensile strength 26-30 tons

At turned off part or Over threads 2" and 1-3/4" No. of threads per inch 9



Are the stays drilled at the outer ends  No Margin stays: Diameter { At turned off part, or Over threads. 2" }

No. of threads per inch 9

Tubes: Material **O H Steel** External diameter { Plain 3" Stay 3" Thickness { #3 LSG 5/16" & 1/4" No. of threads per inch 9

Pitch of tubes 4-1/8" x 4-3/16" Manhole compensation: Size of opening

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 { Plate Rivets

Internal diameter Thickness of crown No. and diameter stays Inner radius of crown

How connected to shell Size of doubling plate under dome Diameter of rivet holes and of rivets in outer row in dome connection to shell

Type of Superheater **Smoke Tube** Manufacturers of { Tubes **National Tube Co., Ellwood City Pa.,** Steel forgings Steel castings

Number of elements 48 Material of tubes **O H Seamless Steel** Internal diameter and thickness of tubes .69 .095

Material of headers **O H Seamless Tube** Tensile strength Thickness 1-1/8" Can the superheater be shut off the boiler be worked separately  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 1/2" dia. Crosby Special Quick Relief Are the safety valves fitted with easing gear  No

Pressure to which the safety valves are adjusted 200 lbs. Hydraulic test pressure tubes forgings and castings 550 lbs. and after assembly in place 550 lbs. Are drain 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

The foregoing is a correct description,  
**DOMINION BRIDGE CO., LIMITED** Manufactured by  
*R. A. Stawley*

1942-  
 Dates of Survey { During progress of work in shops -- May 7, 8, 13, July 10, 16, 20, 30 Aug. 10, 11, 21, 25, Sept. 1, 3, 4, 9, 12, 14, 15, 19, 24, 29, 30, Aug. 4, Sept. 6, Oct. 8, Nov. 12, Dec. 11, Jan. 10, Feb. 7, Mar. 12, Apr. 13, May 10, last visit May 20th., 1943. Total No. of visits 114  
 while building { During erection on board vessel --

Is this Boiler a duplicate of a previous case  No If so, state Vessel's name and Report No. *Rockwood Park*

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) **These BOILERS have been constructed under Special Survey and in accordance with the Approved Plans. The materials and workmanship are good.**

The shell longitudinal and circumferential end 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 plates are welded by the Union Melt Process. The BOILERS were tested hydrostatically at 350 lbs. per square inch pressure and found tight.

These boilers have been properly installed and the safety valves adjusted under steam at 200 lbs. per sq. in. and washers noted and tested for accumulation.

Survey Fee ... \$ 325.00 When applied for, July 16 1943  
 Travelling Expenses (if any)  Included When received, 19

*R. A. Stawley* *H. G. R. Pritchard*  
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **FRI. 17 SEP 1943**  
 Assigned *see minute on F.S. Rpt.*