

# REPORT ON BOILERS.

No. 1362

TUE. JAN. 9-1917

Completion of Barron Report No. 1672

Received at London Office

of writing Report

191 When handed in at Local Office

191 Port of Montreal

No. in Survey held at Montreal

Date, First Survey July 14

Last Survey Dec. 15 1916

No. of Safety Book. U.S.A. on the Twin Screw Submarine "Mikula Selianovitch"

(Number of Visits) Gross 3514  
Net 2041

Master John L. Reid Built at Montreal By whom built Canadian Vickers Ltd. When built 1916

Machines made at Barron in Furness By whom made Vickers Ltd. When made 1916

Boilers made at " " By whom made " " When made 1916

Registered Horse Power Owners Imperial Russian Government Port belonging to Petrograd.

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel from Beardmore Ltd. & Babcock & Wilcox Ltd. Frodingham & Co.

Letter for record (S) Total Heating Surface of Boilers 11056 sq ft Is forced draft fitted Yes No. and Description of

Boilers 4 Nos double ended. Working Pressure 180 lbs Tested by hydraulic pressure to 360 Date of test 19/5/16  
24/5/16  
3/6/16  
6/6/16

No. of Certificate 278 Can each boiler be worked separately Yes Area of fire grate in each boiler 70 sq ft No. and Description of

Safety valves to each boiler 1 No spring loaded Area of each valve 12.56 sq in Pressure to which they are adjusted 183 lbs

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 18 in Mean dia. of boilers 15' 7 7/16" Length 11' 6"

Material of shell plates Steel Thickness 17/16 Range of tensile strength 28/32 tons Are the shell plates welded or flanged No.

Description of riveting: cir. seams D.P. lap long. seams R.R. double butt Diameter of rivet holes in long. seams 1/32 Pitch of rivets 1 1/8"

Width of plates or width of butt straps 22 1/4" Percentages of strength of longitudinal joint rivets 87.7 Working pressure of shell by

Rules 210 lbs Size of manhole in shell 20" x 16" Size of compensating ring 3' 6 1/4" x 2' 6 3/4" x 1 7/16" No. and Description of Furnaces in each

Boiler 3 corrugated Material Steel Outside diameter 4' 3 1/4" Length of plain part — Thickness of plates 5/8"

Description of longitudinal joint Weld No. of strengthening rings — Working pressure of furnace by the rules 196 lbs Combustion chamber

Material Steel Thickness: Sides 9/32" Back 9/32" Top 9/32" Bottom 1" Pitch of stays to ditto: Sides 8 3/4" x 7 3/8" Back 8 3/4" x 7 3/8"

If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 186 lbs Material of stays Steel Diameter at

Smallest part 1.440" Area supported by each stay 64.50 sq in Working pressure by rules 180 lbs End plates in steam space: Material Steel Thickness 1" / 64

How are stays secured Drill nuts Working pressure by rules 180 lbs Material of stays Steel Diameter at smallest part 7.230 in

Area supported by each stay 324 sq in Working pressure by rules 232 lbs Material of Front plates at bottom Steel Thickness 27/32 Material of

Inner back plate Steel Thickness 27/32 Greatest pitch of stays 3 1/4" x 8 3/4" Working pressure of plate by rules 95 lbs Diameter of tubes 2 1/2"

Material of tube plates Steel Thickness: Front 27/32" Back 1/16" Mean pitch of stays 9.06 Pitch across wide

Inter spaces 12 3/4" Working pressures by rules 190 lbs Girders to Chamber tops: Material Steel Depth and thickness of

Girders at centre 9 1/2" x 1 1/2" Length as per rule 32" Distance apart 8 3/4" Number and pitch of Stays in each 3 - 7 3/8"

Working pressure by rules 210 lbs Superheater or Steam chest: how connected to boiler None Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

Stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

## VERTICAL DONKEY BOILER— No. Description Manufacturers of steel

Made at By whom made When made Where fixed Working pressure

Tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can

enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile

Strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Percentage of strength of joint Plates Working pressure of shell by rules Thickness of shell crown plates

Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace

Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown

Radius of do. Stayed by Diameter of uptake Thickness of uptake plates

Thickness of water tubes

FOR CANADIAN VICKERS LIMITED

The foregoing is a correct description,

J. H. Miller Manufacturer.

Dates Survey while building: During progress of work in shops -- Mar. 1916. 1. 3. 6. 8. 10. 14. 15. 17. 20. 22. 27. 28. 30. April 4. 7. 10. 5. 18. 20. 26. 28. May 1. 3. 5. 6. 9. 12. 15. 19. 22. 24. 27. 30. June 1. 3. 6. 7. 14. 21. 24 July 4. During erection on board vessel -- July 14. 17. 19. 21. 24. Aug. 2. 5. 14. 19. 22. 28. 30. 31. Sept. 1. 5. 6. 13. 20. 29 Oct. 2. 3. 4. 6. 7. 10. 12. 21. 24. 27. 28. Nov 7. 8. Dec. 9. 15. Total No. of visits In Montreal 39.

Is the approved plan of main boiler forwarded herewith No. " " " donkey " " " " " No.

Lloyd's Register Foundation

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)

Certificate (if required) to be sent to  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £	:	:	When applied for,
Special .. .. . £	:	:	.....19.....
Donkey Boiler Fee .. .. £	:	:	When received,
Travelling Expenses (if any) £	:	:	.....19.....

Committee's Minute *See other report*  
Assigned

New York DEC 28 1916

FRI. JUN. 1922  
FRI. JUL. 14 1922

Engineer Surveyor to Lloyd's Register of British & Foreign Ships

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