

REPORT ON BOILERS.

No. 681.

REC'D NEW YORK Dec. 11-1918.

Date of writing Report

No. 204 1918

When handed in at Local Office

No. 36 1918

Port of

Received at London Office

TUE. 31 DEC. 1918

No. in Survey held at *Vancouver B.C.* Date, First Survey *July 11th 18* Last Survey *Oct 23rd 1918*
 Reg. Book, *18* on the *Three Scotch Marine Boilers for "War Charge"* (Number of Visits *18*) Gross *5787.33*
 Master *A. S. Walker* Built at *Vancouver B.C.* By whom built *J. Coughlan & Son* Tons Net *4229.24*
 Engines made at *Newville N.Y.* By whom made *Kerr Lindsay & Co.* When built *1918*
 Boilers made at *Vancouver B.C.* By whom made *The Vulcan Iron Works* When made *1918*
 Registered Horse Power *442* Owners *Messrs Ruben & Verel* Port belonging to *Vancouver B.C.*

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

(Letter for record ☒) Total Heating Surface of Boilers *8008.54* Is forced draft fitted *Yes* No. and Description of Boilers *Three Scotch Marine* Working Pressure *190 lbs* Tested by hydraulic pressure to *300 lbs* Date of test *17th Sept 18*
 No. of Certificate *1* Can each boiler be worked separately *Yes* Area of fire grate in each boiler *60 sq ft* No. and Description of safety valves to each boiler *2 Corby Spring Loaded* Area of each valve *9.6 sq in* Pressure to which they are adjusted *190 lbs*
 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 *18"* Mean dia. of boilers *14'-9 3/8"* Length *12'-1 3/8"*
 Material of shell plates *Steel* Thickness *1 1/16"* Range of tensile strength *60,000-65,000* Are the shell plates welded or flanged *Flanged*
 Descrip. of riveting: cir. seams *D.R. Lap* long. seams *J.R. D.B. 1 1/2"* Diameter of rivet holes in long. seams *1 1/16"* Pitch of rivets *8 3/8 x 4 3/8*
 Lap of plates or width of butt straps *22 1/2 x 14 1/2"* Per centages of strength of longitudinal joint rivets *97.5* Working pressure of shell by rules *208.9* Size of manhole in shell *12 x 16"* Size of compensating ring *None* No. and Description of Furnaces in each boiler *3 Morrison Comp* Material *Steel* Outside diameter *48 3/16"* Length of plain part top *8 1/2"* Thickness of plates crown *1 3/32"* bottom *1 9/32"*
 Description of longitudinal joint *Stitch seam* of strengthening rings *None* Working pressure of furnace by the rules *195.9* Combustion chamber plates: Material *Steel* Thickness: Sides *9/16"* Back *9/16"* Top *9/16"* Bottom *7/8"* Pitch of stays to ditto: Sides *10 3/8 x 10 3/8"* Back *7 3/8 x 7 3/8"*
 Top *7 1/2 x 7 1/2"* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *212.5* Material of stays *Steel* Area at smallest part *1.47* Area supported by each stay *51.4* Working pressure by rules *212.5* End plates in steam space: Material *Steel* Thickness *1 1/16"*
 Pitch of stays *16 1/4 x 16 1/4"* How are stays secured *D: Nuts* Working pressure by rules *191.5* Material of stays *Steel* Area at smallest part *4.908*
 Area supported by each stay *264.06* Working pressure by rules *193.3* Material of Front plates at bottom *Steel* Thickness *3/4"* Material of Lower back plate *Steel* Thickness *3/4"* Greatest pitch of stays *13 x 7 3/8"* Working pressure of plate by rules *314.5* Diameter of tubes *3" 00"*
 Pitch of tubes *48 x 4"* Material of tube plates *Steel* Thickness: Front *3/4"* Back *3/4"* Mean pitch of stays *12 3/8 x 8"* Pitch across wide water spaces *13"* Working pressures by rules *204* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *10 x 3 1/4 double* Length as per rule *36"* Distance apart *c/c 7 1/2"* Number and pitch of Stays in each *3 @ 7 1/2"*
 Working pressure by rules *236* Steam dome: description of joint to shell ☒ % of strength of joint ☒
 Diameter ☒ Thickness of shell plates ☒ Material ☒ Description of longitudinal joint ☒ Diam. of rivet holes ☒
 Pitch of rivets ☒ Working pressure of shell by rules ☒ Crown plates ☒ Thickness ☒ How stayed ☒

SUPERHEATER.

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

The foregoing is a correct description,

J. Coughlan & Son Manufacturer.

Dates of Survey *July 11, 16 Aug 3, 7, 14, 19, 26 Sept 4, 9, 12, 17*
 while building *Sept 25 Oct 2, 7, 14, 19, 22, 23*

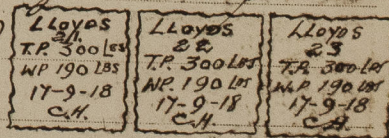
Is the approved plan of boiler forwarded herewith

Total No. of visits *18*

GENERAL REMARKS

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

These Boilers were built under Special Survey and in accordance with the approved Plans. The material and workmanship are both good. Upon completion they were tested under hydraulic pressure to 300 lbs and found satisfactory. The following marks have been stamped upon the Boilers:

Survey Fee *\$70.00*When applied for, *1918*Travelling Expenses (if any) £ *✓*When received, *22/4/19*

Committee's Minute

FRI. 10 JAN. 1919

Assigned

James Murdoch & Co. Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

W787-001