

REPORT ON BOILERS.

No. 13065

Received at London Office

Date of writing Report 31st May 1928 When handed in at Local Office 31st May 1928 Port of Middlesbrough

No. in Reg. Book

Survey held at

Stockton

Date, First Survey

29.7.1927

Last Survey

3.10.1927

on the

Twin screw steamer

"Quebec"

(Number of Visits

4

Gross 7015.59

Tons

Net 2481.01

Built at

Lewis Quebec

By whom built

Davie S.B.C.

Yard No.

497

When built

1929.28

Engines made at

Hartlepool

By whom made

Richardson, Westgarth & Co

Engine No.

2669

When made

1927.28

Boilers made at

"

By whom made

"

"

Boiler No.

2669

When made

1927

Owners

Canada Steamship Lines Ltd

Port belonging to

Montreal

VERTICAL DONKEY BOILER.

Made at

Stockton

By whom made

Riley Bros.

Boiler No.

5755

When made

1927

Where fixed

Manufacturers of Steel

David Colville & Sons

Total Heating Surface of Boiler

213 sq

Is forced draught fitted

Coal or Oil fired

No. and Description of Boilers

One vertical Meredith

Working pressure

100 lbs

Tested by hydraulic pressure to

200 lbs.

Date of test

3.10.27

No. of Certificate

6581

Area of Firegrate in each Boiler

18 sq

No. and Description of safety valves to each boiler

Area of each set of valves per boiler

per rule 9.8 as fitted

Pressure to which they are adjusted

100 lbs Are they fitted with easing gear

State whether steam from main boilers can enter the donkey boiler

no

Smallest distance between boiler or uptake and bunkers

or woodwork

2'0"

Is oil fuel carried in the double bottom under boiler

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

no

Largest internal dia. of boiler

5'6"

Height

8'6"

Shell plates: Material

steel

Tensile strength

28/32

Thickness

T+B = 13/32 C = 11/16

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

S. R.

long. seams

T+B = S. R. lap C = T. R. lap

Dia. of rivet holes in

circ. seams INTER. END: 13/16 15/16 T+B = 13/16 C = 11/16

Pitch of rivets

INTER. 2 1/8" END: 2 1/8"

Percentage of strength of circ. seams

plate 59.3 rivets 55.9 52.6 47.5

of Longitudinal joint

plate 67.7 72.2 rivets 78.3 73.3 combined

Working pressure of shell by rules

112 lbs.

Thickness of butt straps

outer inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat

dished

Material

steel

Tensile strength

26/30

Thickness

9/16"

Radius

5'6"

Working pressure by rules

100 lbs

Description of Furnace: Plain, spherical, or dished crown

dished

Material

steel

Tensile strength

26/30

Thickness

5/8

External diameter

top 4'9 1/2" bottom 4'11 1/2"

Length as per rule

2'1 3/4"

Working pressure by rules

140 lbs

Pitch of support stays circumferentially

✓

and vertically

✓

Are stays fitted with nuts or riveted over

✓

Diameter of stays over thread

✓

Radius of spherical or dished furnace crown

4'0"

Working pressure by rule

108 lbs

Thickness of Ogee Ring

✓

Diameter as per rule

D

Working pressure by rule

✓

Combustion Chamber: Material

steel

Tensile strength

26/30

Thickness of top plate

5/8"

Radius if dished

✓

Working pressure by rule

134 lbs

Thickness of back plate

5/8"

Diameter if circular

✓

Length as per rule

✓

Pitch of stays

11" x 12"

Are stays fitted with nuts or riveted over

nuts

Diameter of stays over thread

1 5/8"

Working pressure of back plate by rules

102 lbs.

Tube Plates: Material

front steel back

Tensile strength

28/32 26/30

Thickness

5/8"

Mean pitch of stay tubes in nests

9 3/4 x 6 1/2"

If comprising shell, Dia. as per rule

front

✓

Pitch in outer vertical rows

6 1/2"

Dia. of tube holes FRONT

stay 2 1/4" plain 2 1/4"

BACK

stay 2 1/2" plain 2 5/16"

100

Is each alternate tube in outer vertical rows a stay tube

yes

Working pressure by rules

front 100 back 207

Girders to combustion chamber tops: Material

steel

Tensile strength

28/32

Depth and thickness of girder at centre

6 1/4" x 5/8" (double)

Length as per rule

1'10"

Distance apart

9"

No. and pitch of stays in each

one

Working pressure by rule

177 lbs.

PILLA
"
"
"
"
Centr
Stiff
Plati
STRING
Upper
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"
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Thic
in
Thic
in
Thic
If Sl
Secon
Strin
STR
FLAT PLAT
"
BOTTOM P
of Strak
BILGE PLAT
Strakes
SIDE PLAT
Strakes
UPPER DE
strake in
UPPER DE
strake in
STRAKE BE
strake in
STRAKE BE
strake in
POOP SIDE
BRIDGE SID
FOREC'TLE S
Total No.
MIDSHIP
"
"
"
COLLISIO
AFTER PI
STEEL.

Crown stays: Material ☒ Tensile strength ☒ Diameter ☒ { at body of stay, or over threads. ☒

No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒

Screw stays: Material *steel* Tensile strength *26/30* Diameter ☒ { at turned off part, or over threads. *1 5/8"* No. of threads per inch *9*

Area supported by each stay *132 sq"* Working pressure by rules *115 lbs.* Are the stays drilled at the outer ends *no*

Tubes: Material *iron* External diameter ☒ { plain *2 1/4" to 2 5/6"* stay *2 1/4" to 2 1/2"* Thickness ☒ *11 w.g. 5/16"*

No. of threads per inch *9* Pitch of tubes *3 1/4" x 3 1/4" 9 3 1/4" x 4 1/2"* Working pressure by rules *h. 140. s. 272 lbs.*

Manhole Compensation: Size of opening in shell plate *16" x 11"* Section of compensating ring *4 1/2" x 5 1/8"* No. of rivets and diameter *34, 13/16"* Outer row rivet pitch at ends *4 1/2"* Depth of flange if manhole flanged ☒

Uptake: External diameter ☒ Thickness of uptake plate ☒

Cross Tubes: No. ☒ External diameters ☒ Thickness of plates ☒

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

The foregoing is a correct description,
Riley Bros. (Boilermakers) *Ed.*
(S) J. H. Shields Secretary.

Dates of Survey { During progress of work in shops - *1927 Jul. 29, Aug 5, Sep. 8, 16, 26, 27, Oct 3.* Is the approved plan of boiler forwarded herewith (If not state date of approval.) *Yes*

while building { During erection on board vessel - *See Machinery report* Total No. of visits *7*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler is a duplicate of Messrs. Riley Bros. No. 5754. (Mdb. Rpt No. 13035)*

The materials and workmanship are good.
This boiler has been built under special survey in accordance with the Rules and Approved plan. It is being shipped to Quebec.

Survey Fee ... £ : : When applied for. 19

Travelling Expenses (if any) £ : : When received. 19

Committee's Minute
Assigned
TUES. 14 AUG 1928
See Mdb Rpt 2907

(S) P. T. Brown & Co. Allan
Engineer Surveyor to Lloyd's Register of Shipping.
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