

RECEIVED

NOV 1950

D.O.

## REPORT ON BOILERS.

No. 46305

16 NOV 1950

Received at London Office.

Date of writing Report 20-10-1950 When handed in at Local Office 21-11-1950 Port of GLASGOW

No. in Reg. Book. Survey held at GLASGOW Date, First Survey 19<sup>th</sup> December 1949 Last Survey 21<sup>st</sup> October 1950

on the S/S "Jon Baldvinsson" (Number of Visits 44) Gross Tons Net Tons

Master Built at ABERDEEN By whom built HALL RUSSELL &amp; CO LTD Yard No. 826 When built 1951

Engines made at Aberdeen By whom made " Engine No. 548 When made "

Boilers made at GLASGOW By whom made BARCLAY CURLE &amp; CO LTD Boiler No. 5848/11 When made 1950

Nominal Horse Power M.N. 233 Owners. Icelandic Government Port belonging to Reykjavik

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

Manufacturers of Steel COLVILLE (Letter for Record "S")

Total Heating Surface of Boilers 2800<sup>sq</sup> ft Is forced draught fitted YES Coal or Oil fired OIL FIRED

No. and Description of Boilers ONE SINGLE ENDED MULTITUBULAR Working Pressure 225 LB/SQ IN

Tested by hydraulic pressure to 388 LB/SQ IN Date of test 13-10-50 No. of Certificate 23265 Can each boiler be worked separately -

Area of Firegrate in each Boiler - No. and Description of safety valves to each boiler 1-2 1/4 DOUBLE SPRING I.H.L.

Area of each set of valves per boiler per Rule 7.30 as fitted 7.940 Pressure to which they are adjusted 225 LB/SQ IN Are they fitted with casing 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 4'-3" Is oil fuel carried in the double bottom under boilers open floor

Smallest distance between shell of boiler and tank top plating - Is the bottom of the boiler insulated -

Largest internal dia. of boilers 15'-9" Length 11'-0" Shell plates: Material STEEL Tensile strength 30-34 TONS

Thickness 1 1/2 Are the shell plates welded or flanged - Description of riveting: circ. seams end D.R. inter -

long. seams T.R.D.B.S. Diameter of rivet holes in circ. seams 1 9/16 long. seams 1 9/16 Pitch of rivets 4'-4" 10'-8"

Percentage of strength of circ. end seams plate 64.4% rivets 44.3% Percentage of strength of circ. intermediate seam plate 85.2% rivets 86.1%

Percentage of strength of longitudinal joint plate 85.2% rivets 86.1% combined 87.7% Working pressure of shell by Rules 226 LB/SQ IN

Thickness of butt straps outer 1 3/16 inner 1 5/16 No. and Description of Furnaces in each Boiler 3 DEIGHTON SECTION

Material STEEL Tensile strength 26-30 TONS Smallest outside diameter 47 1/4

Length of plain part top 3/4 bottom 3/4 Thickness of plates crown 3/4 bottom 3/4 Description of longitudinal joint WELD

Dimensions of stiffening rings on furnace or c.c. bottom - Working pressure of furnace by Rules 233 LB/SQ IN

End plates in steam space: Material STEEL Tensile strength 26-30 TONS Thickness 1 7/16 Pitch of stays 21 1/2 x 20

How are stays secured NUTS INSIDE &amp; OUTSIDE Working pressure by Rules 225 LB/SQ IN

Tube plates: Material front STEEL back STEEL Tensile strength 26-30 TONS Thickness 31/32 29/32

Mean pitch of stay tubes in nests 11-25 Pitch across wide water spaces 14 1/4 Working pressure front 228 LB/SQ IN back 236 LB/SQ IN

Girders to combustion chamber tops: Material STEEL Tensile strength 28-32 TONS Depth and thickness of girder

at centre (9 1/2 x 7/8) Length as per Rule 33-4 Distance apart 9 1/2 No. and pitch of stays

each 30 9 1/2 x 8 1/2 Working pressure by Rules 234 LB/SQ IN Combustion chamber plates: Material STEEL

Tensile strength 26-30 TONS Thickness: Sides 23/32 Back 23/32 Top 23/32 Bottom 7/8

Pitch of stays to ditto: Sides 8 1/4 x 9 1/2 Back 9 1/8 x 8 5/8 Top 8 1/4 x 9 1/2 Are stays fitted with nuts or riveted over NUTS

Working pressure by Rules 230 LB/SQ IN Front plate at bottom: Material STEEL Tensile strength 26-30 TONS

Thickness 31/32 Lower back plate: Material STEEL Tensile strength 26-30 TONS Thickness 7/8

Pitch of stays at wide water space 14 1/4 Are stays fitted with nuts or riveted over NUTS

Working pressure 226 LB/SQ IN Main stays: Material STEEL Tensile strength 28-32 TONS

At body of stay 3 5/8 No. of threads per inch 6 1/4 Area supported by each stay 21 1/2 x 20

Over threads - Working pressure by Rules 248 LB/SQ IN Screw stays: Material STEEL Tensile strength 26-30 TONS

At turned off part 2 1/4 2 1 3/4 No. of threads per inch 9 1/4 Area supported by each stay 9 1/2 x 8 1/4

Over threads -

Lloyd's Register Foundation

002071-002078-0162



Working pressure by Rules 231.40/4 ✓ Are the stays drilled at the outer ends No ✓ Margin stays: Diameter 2" ✓ At turned off part, 2 1/4 ✓  
No. of threads per inch 9 1/4 ✓ Area supported by each stay 11 1/6 x 8 5/8 ✓ Working pressure by Rules 245 ✓  
Tubes: Material STEEL ✓ External diameter 3 1/4 ✓ Thickness 5/16 ✓ No. of threads per inch 9 1/4 ✓  
Pitch of tubes 4 1/2 x 4 1/2 ✓ Working pressure by Rules 230.5 ✓ Manhole compensation: Size of opening in  
shell plate 16 x 12 ✓ Section of compensating ring 50 1/4 x 1 1/4 ✓ No. of rivets and diameter of rivet holes 122 @ 1 1/2 ✓  
Outer row rivet pitch at ends 12" ✓ Depth of flange if manhole flanged - ✓ Steam Dome: Material STEEL ✓  
Tensile strength 30-34 tons ✓ Thickness of shell 3/4 ✓ Description of longitudinal joint D.R. ✓  
Diameter of rivet holes 1 1/16 ✓ Pitch of rivets 3 1/2 ✓ Percentage of strength of joint 69.7% ✓  
Internal diameter 36" ✓ Working pressure by Rules 328.0 ✓ Thickness of crown 1" ✓ No. and diameter of  
stays 3 @ 2 1/2 ✓ Inner radius of crown 1 3/4 ✓ Working pressure by Rules As app. ✓  
How connected to shell D.R. ✓ Size of doubling plate under dome 62 1/4 DIA x 1 1/4 ✓ Diameter of rivet holes and pitch  
of rivets in outer row in dome connection to shell 1 1/2 @ 4.02 ✓

Type of Superheater

McL Gals Copie attached

Manufacturers of

Tubes

Steel forgings

Steel castings

Number of elements

Material of tubes

Internal diameter and thickness of tubes

Material of headers

Tensile strength

Thickness

Can the superheater be shut off and

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

3.14

Are the safety valves fitted with casing gear

Yes

Working pressure as per

Rules

As app.

Pressure to which the safety valves are adjusted

225 10/0"

Hydraulic test pressure:

tubes

forgings and castings

Yes

and after assembly in place

507 10/0"

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

The foregoing is a correct description,

Wm G Dismall

Manufacturer.

Dates  
of Survey  
while  
building

During progress of  
work in shops - -  
During erection on  
board vessel - - -

1949 Dec 19 1950 Jan 16 Feb 10 23 MAR 29  
31 APR 5 21 AUG 19 19 SEP 14 OCT 13 24

Are the approved plans of boiler and superheater forwarded herewith

YES (Boiler)

Total No. of visits in shop 14

Is this Boiler a duplicate of a previous case

YES

If so, state Vessel's name and Report No.

HALL RUSSELL YARD NO 825

BOALBY CUBA 5828/10. C.L.S. RPT. NO 76159

GENERAL REMARKS

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

This boiler has been constructed under

Special Survey in accordance with the Society's Rules and the approved plans. The material and workmanship  
are good. The boiler has been dispatched to Messrs Hall, Russell, Aberdeen for installation in their  
reel yard no 826. Superheater elements to be fitted at Aberdeen.

This boiler has been securely fitted on board, examined under steam  
& safety valves adjusted as stated. Accumulation test satisfactory.  
Oil fuel & clean smothering arrangements found in order.

Almeida

Aberdeen

Survey Fee

£ 46 : 12 : 0

When applied for

15 NOV 1950

Travelling Expenses (if any) £

When received

Committee's Minute

GLASGOW 15 NOV 1950

Assigned

Deferred for comp.

J. Blayney

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register  
Foundation