

REPORT ON BOILERS.

25 AUG 1941

Received at London Office

Date of writing Report _____ 19__ When handed in at Local Office _____ 19__ Port of Belfast.

No. in Reg. Book Belfast. Date, First Survey _____ Visits included in r.e. mch. report. _____ Last Survey _____ 19__

on the STEEL Co. "COWSLIP" (Number of Visits _____) Tons { Gross 811.39 Net 301.14

Built at Belfast By whom built Messrs Haland, Wolff Ltd Yard No. 1105 When built 1941

Engines made at Belfast By whom made Haland, Wolff Ltd Engine No. 1102 When made 1941

Boilers made at Belfast By whom made Haland, Wolff Ltd Boiler No. 1102 When made 1941

Nominal Horse Power 399 Owners The Admiralty. Port belonging to _____

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Messrs Colvilles Ltd (Letter for Record S)

Total Heating Surface of Boilers 6852 sq. ft. Is forced draught fitted Yes Coal or Oil fired Oil

No. and Description of Boilers Two - Single Ended "Horden-Johnson" Type Working Pressure 225 lbs/sq. in.

Tested by hydraulic pressure to 388 lbs/sq. in. Date of test 4.4.41 No. of Certificate 1135 FORD BUR each boiler be worked separately Yes

Area of Firegrate in each Boiler _____ No. and Description of safety valves to each boiler Two - Improved High Lift 2 3/4" dia

Area of each set of valves per boiler { per Rule 8.92 sq. in. as fitted 11.88 sq. in. Pressure to which they are adjusted 225 lbs/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 9" Is oil fuel carried in the double bottom under boilers No

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

Largest internal dia. of boilers 16'-6" Length 7'-6" between tube plates Material Steel Tensile strength 32/36 tons

Thickness 1 1/2" Are the shell plates welded or flanged No Description of riveting: circ. seams D.R.L.

long. seams TR DBS Diameter of rivet holes in { circ. seams 1 1/2" Pitch of rivets { 3.917" long. seams 1 9/16" 9.875"

Percentage of strength of circ. end seams { plate 61.55 rivets 43.4 Percentage of strength of circ. intermediate seam { plate _____ rivets _____

Percentage of strength of longitudinal joint { plate 84.2 rivets 87.4 combined 85.9 Working pressure of shell by Rules: 228 lbs

Thickness of butt straps { outer 1 3/16" inner 1 5/16" No. and Description of Furnaces in each Boiler Three Corrugated "Deighton" Section

Material Steel Tensile strength 26/30 tons Smallest outside diameter 48 1/2"

Length of plain part { top _____ bottom _____ Thickness of plates { crown 3/4" bottom _____ Description of longitudinal joint Fire Weld

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

End plates in steam space: Material Steel Tensile strength 26/30 tons Thickness 1 1/4" Pitch of stays 17 1/2" x 18"

How are stays secured Nuts and washers inside & outside.

Tube plates: Material { front Steel back Steel Tensile strength { 26/30 tons Thickness { 1 3/32" 1 3/32"

Mean pitch of stay tubes in nests 8.69" Pitch across wide water spaces 13 1/2"

Girders to combustion chamber tops: Material _____ Tensile strength _____ Depth and thickness of girder at centre _____ Length as per Rule _____ Distance apart _____ No. and pitch of stays in each _____

Combustion chamber plates: Material _____ Tensile strength _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____

Pitch of stays to ditto: Sides _____ Back _____ Top _____ Are stays fitted with nuts or riveted over _____

Front plate at bottom: Material Steel Tensile strength 26/30 tons

Thickness 1 1/32" Lower back plate: Material Steel Tensile strength 26/30 tons Thickness 1 3/32"

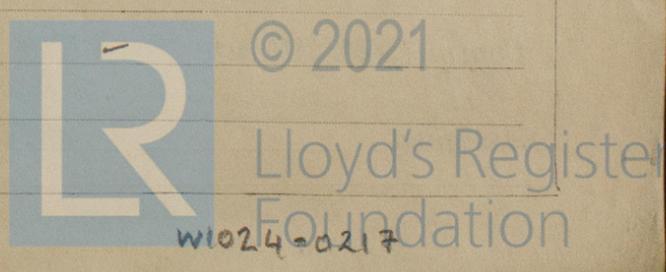
Pitch of stays at wide water space _____ Are stays fitted with nuts or riveted over _____

Main stays: Material Steel Tensile strength 28/32 tons

Diameter { At body of stay, or Over threads 3 1/4" No. of threads per inch 6

crew stays: Material _____ Tensile strength _____

Diameter { At turned off part, or Over threads _____ No. of threads per inch _____



Are the stays drilled at the outer ends

Margin stays: Diameter At turned off part. Over threads

No. of threads per inch

SMOKE Tubes: Material Steel External diameter Plain 2 1/2" Stay 2 1/2" Thickness 9 W.G. No. of threads per inch 9

Pitch of tubes SMOKE 3 3/4" x 3 3/4" Manhole compensation: Size of opening in 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 3 3/8" in back end plate 3 5/8" in front end plate Steam Dome: Material

Tensile strength Thickness of shell Description of longitudinal joint 3" 9/16" x 8 W.G. THICK NUMBER OF TUBES - 53 Plate Rivets

WATER TUBES Material - SD Steel 28 T.S./sq. in. max. Pitch of rivets Percentage of strength of joint

Diameter of rivet holes Thickness of crown No. and diameter of stays Inner radius of crown

Internal diameter Diameter of rivet holes and pitch of stays

How connected to shell Size of doubling plate under dome

of rivets in outer row in dome connection to shell

Type of Superheater Manufacturers of Tubes Steel forgings Steel castings

Number of elements Material of tubes Internal diameter and thickness of tube's

Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler

Area of each safety valve Are the safety valves fitted with easing gear

Pressure to which the safety valves are adjusted Hydraulic test pressure:

tubes forgings and castings and after assembly in place Are drain cocks or valves fitted to free the superheater from water where necessary

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

The foregoing is a correct description,
 HARBAND AND WOLFF, LIMITED.
 Manufacturer: A. Marshall

Dates of Survey During progress of work in shops - - Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

while building During erection on board vessel - - - Total No. of visits

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. "VERYAIN" BEL RPT No.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under Special Survey in accordance with the Rules & approved plan. The materials and workmanship are good. These boilers have been efficiently installed onboard the vessel, all safety valves adjusted under steam and accumulation tests carried out with satisfactory results.

Survey Fee £ : : } When applied for, 19

Travelling Expenses (if any) £ : : } When received, 10

Allen G. Thomas
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. 29 AUG 1941

Assigned See Bel. 7E 13048

