

REPORT ON BOILERS.

No. 50545

Received at London Office

10 SEP 1930
11 JUN 1930

Date of writing Report 19 When handed in at Local Office 7. 6. 1930 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 17. 1. 30 Last Survey 21-5- 1930

on the "CITE DE LEVIS" (Number of Visits 16) Gross 1259 Tons Net 467

Master Built at Old Kilpatrick By whom built Napier & Miller Ltd Yard No. 274 When built 1930

Engines made at Glasgow By whom made McKie & Baxter Ltd Engine No. 1259 When made 1930

Boilers made at Glasgow By whom made W & W Henderson & Co Ltd Boiler No. 16F When made 1930

Nominal Horse Power 277 Owners Lewis Ferry Company Port belonging to Glasgow

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel David White & Sons Ltd (Letter for Record (S))

Total Heating Surface of Boilers 44380' Is forced draught fitted yes Coal or Oil fired coal

No. and Description of Boilers Two single ended 2SB Working Pressure 185

Tested by hydraulic pressure to 328 Date of test 21-5-30 No. of Certificate 18737 Can each boiler be worked separately

Area of Firegrate in each Boiler 57.750' No. and Description of safety valves to each boiler Two direct spring
Area of each set of valves per boiler Rule 6.90" Pressure to which they are adjusted 7.070" 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 Is oil fuel carried in the double bottom under boilers

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

Largest internal dia. of boilers 14'-6" Length 11'-0" Shell plates: Material steel Tensile strength 28-32 tons

Thickness 1 15/64" Are the shell plates welded or flanged no Description of riveting: circ. seams 3.84" end
long. seams DBS TR Diameter of rivet holes in circ. seams 1 1/4" Pitch of rivets 9"

Percentage of strength of circ. end seams plate 64.6 rivets 42.4 Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate 86.2 rivets 85 combined 89.2 Working pressure of shell by Rules 186 tons

Thickness of butt straps outer 1 15/16" inner 1 1/16" No. and Description of Furnaces in each Boiler Three Morrison

Material steel Tensile strength 26-30 tons Smallest outside diameter 43.125"

Length of plain part top bottom Thickness of plates crown 9/16" bottom Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.e. bottom Working pressure of furnace by Rules 189

End plates in steam space: Material steel Tensile strength 26-30 tons Thickness 1 13/64" Pitch of stays 18" x 18 1/8"

How are stays secured DN Working pressure by Rules 185

Tube plates: Material front steel back Thickness 26-30 tons Thickness 63/64" 3/4"

Mean pitch of stay tubes in nests 10" Pitch across wide water spaces 13 3/4" Working pressure front 191 back 200

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

at centre 2 @ 7 1/4" x 3/4" Length as per Rule 29.595" Distance apart 8 1/4" No. and pitch of stays

at each 2 @ 9 1/4" Working pressure by Rules 185 Combustion chamber plates: Material steel

Tensile strength 26-30 tons Thickness: Sides 41/64" Back 21/32" Top 41/64" Bottom 13/16"

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

Working pressure by Rules 185 Front plate at bottom: Material steel Tensile strength 26-30 tons

Thickness 63/64" Lower back plate: Material steel Tensile strength 26-30 tons Thickness 53/64"

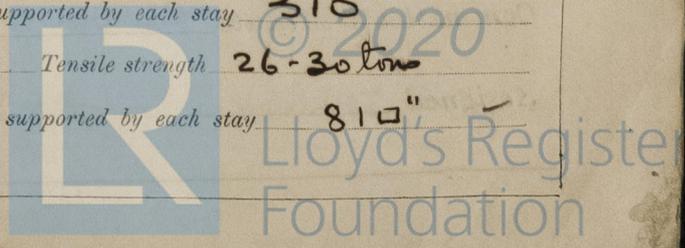
Pitch of stays at wide water space 14 1/2" x 9" Are stays fitted with nuts or riveted over nuts

Working Pressure 187 Main stays: Material steel Tensile strength 28-32 tons

Diameter At body of stay 3" No. of threads per inch 6 Area supported by each stay 310

Working pressure by Rules 216 Screw stays: Material steel Tensile strength 26-30 tons

Diameter At turned off part 1 5/8" No. of threads per inch 9 Area supported by each stay 810"



Working pressure by Rules 188 ✓ Are the stays drilled at the outer ends *no* Margin stays: Diameter { At turned off part, or Over threads } 2" ✓
 No. of threads per inch 9 ✓ Area supported by each stay 108.50" ✓ Working pressure by Rules 234 ✓
 Tubes: Material *steel* External diameter { Plain 2 3/4" Stay 2 3/4" } Thickness { 9 L.S.S. 3/8", 7/16" } No. of threads per inch 9 ✓
 Pitch of tubes 4" x 4" ✓ Working pressure by Rules 215" ✓ Manhole compensation: Size of opening in shell plate 20 1/4" x 16 1/4" Section of compensating ring 9 3/4" x 1 15/64" No. of rivets and diameter of rivet holes 44 @ 1 1/4" ✓
 Outer row rivet pitch at ends 9" ✓ Depth of flange if manhole flanged 3 7/8" ✓ Steam Dome: Material *none* ✓
 Tensile strength _____ Thickness of shell _____ Description of longitudinal joint _____
 Diameter of rivet holes _____ Pitch of rivets _____ Percentage of strength of joint { Plate Rivets } _____
 Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ No. and diameter of stays _____
 Inner radius of crown _____ Working pressure by Rules _____
 How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell _____

Type of Superheater *none* Manufacturers of { Tubes _____ 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 _____
 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 _____ Working pressure as per Rules _____
 Pressure to which the safety valves are adjusted _____ Hydraulic test pressure: tubes _____ 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 _____

FOR THE FOREGOING IS A CORRECT DESCRIPTION,
J. J. Paton DIRECTOR, Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 1930 Jan 17 24 29 Feb 15 19 Mar _____ Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval) _____
 { During erection on board vessel - - - } 5. 12. 18 26 Apr 1. 15. 29 May _____ Total No. of visits 16 _____
 5. 8. 15. 21 _____

Is this Boiler a duplicate of a previous case *no* If so, state Vessel's name and Report No. _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
The materials and workmanship are good.
The boilers have been constructed under special survey in accordance with the Rules.
They will be fitted on board the vessel at Glasgow.

a.b.
 7/6/30.

Survey Fee ... £ 27 : 6 : When applied for, 10 JUN 1930
 Travelling Expenses (if any) £ _____ When received, 4 July 1930

S. J. Davis
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 10 JUN 1930

Assigned TRANSMIT TO LONDON

J. J. Paton See Glasgow Report No. 50653