

REPORT ON BOILERS.

No. 17282

Received at London Office

31 JAN 1931

Date of writing Report 30. 1. 31 When handed in at Local Office 30. 1. 31 Port of Grimsby
 No. in Survey held at Lincoln Date, First Survey 2. 1. 31 Last Survey 20-1-1931
 Reg. Book on the Vertical donkey boiler for the dredger "EYELOPE"
 (Number of Visits 4) Gross 635 Tons Net
 Built at Hebburn-on-Tyne By whom built Hawthorn, Leslie & Co. Ltd. Yard No. 581 When built 1931
 Engines made at By whom made Engine No. When made
 D. Boilers made at Lincoln By whom made Ruston & Hornsby, Ltd. Boiler No. 49153 When made 1931
 Owners Bullepries de Gravens d' Extension Port belonging to La Havre.

VERTICAL DONKEY BOILER.

Made at Lincoln By whom made Ruston & Hornsby, Ltd. Boiler No. 49153 When made 1931 Where fixed on deck.
 Manufacturers of Steel Park Gate Iron & Steel Co. Ltd. Appleby Iron Co. Ltd.
 Total Heating Surface of Boiler 300 sq. ft. ✓ Is forced draught fitted No Coal or Oil fired coal
 No. and Description of Boilers One tubular vertical ✓ Working pressure 125 lb.
 Tested by hydraulic pressure to 238 lb. ✓ Date of test 13th Jan. 1931 No. of Certificate 315
 Area of Firegrate in each Boiler 14.18^{ft} ✓ No. and Description of safety valves to each boiler No, double valve, Rainwater type
 Area of each set of valves per boiler per rule 2.68 ✓ as fitted 6.28 Pressure to which they are adjusted Not adjusted ✓ Are they fitted with easing gear yes
 State whether steam from main boilers can enter the donkey boiler ✓ Smallest distance between boiler or uptake and bunkers
 or woodwork 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 Largest internal dia. of boiler 4'-8 5/8" Height 9'-0" ✓
 Shell plates: Material S. L. steel Tensile strength 28-32 T. ✓ Thickness 7/16" ✓
 Are the shell plates welded or flanged no ✓ Description of riveting: circ. seams end S.R. Lap ✓ inter. S.R. Lap ✓ long. seams R.R. Lap. ✓
 Dia. of rivet holes in circ. seams 25" ✓ 32" ✓ Pitch of rivets 2 5/8" ✓ 2 3/4" ✓ Percentage of strength of circ. seams plate 63.3 ✓ rivets 42.3 ✓ Longitudinal joint plate 71.6 ✓ rivets 65.5 ✓ combined 76 ✓
 Working pressure of shell by rules 134 lb. Thickness of butt straps outer inner
 Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Flat ✓ Material S. L. steel ✓
 Tensile strength 26/30 T. ✓ Thickness 5/8" ✓ Radius Working pressure by rules 128 lb.
 Description of Furnace: Plain, spherical, or dished crown plain ✓ Material S. L. steel Tensile strength 26/30 T.
 Thickness 9/16" ✓ External diameter top 4'-4 5/8" bottom 4'-4 5/8" Length as per rule 3'-4" ✓ Working pressure by rules 128 lb.
 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 flat ✓ Working pressure by rule 128 lb.
 Thickness of Ogee Ring Diameter as per rule Working pressure by rule
 Combustion Chamber: Material Tensile strength Thickness of top plate
 Radius if dished Working pressure by rule Thickness of back plate Diameter if circular
 Length as per rule Pitch of stays Are stays fitted with nuts or riveted over
 Diameter of stays over thread Working pressure of back plate by rules
 Tube Plates: Material S. L. steel Tensile strength 26/30 T. Thickness 5/8" ✓ Mean pitch of stay tubes in nests 10 5/16" ✓
 FIREBOX CROWN If comprising shell, Dia. as per rule front back Pitch in outer vertical rows Dia. of tube holes FRONT stay 2 5/8" shell stay 2 13/16" BACK plain 2 5/8" ✓
 Is each alternate tube in outer vertical rows a stay tube Working pressure by rules front back
 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 Working pressure by rule

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 ☒ Tensile strength ☒ Diameter ☒ at turned off part or over threads ☒ No. of threads per inch ☒

Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒

Tubes: Material *S. Iron Steel* External diameter ☒ plain $2\frac{1}{2}$ stay $2\frac{1}{2}$ Thickness ☒ $11\frac{1}{4}$ $\frac{1}{4}$

No. of threads per inch *9* Pitch of tubes *$3\frac{7}{16}$* Working pressure by rules *125 lb.*

Manhole Compensation: Size of opening in shell plate *15" x 11"* Section of compensating ring *$1\frac{3}{4} \times \frac{3}{4}$* No. of rivets and diameter of rivet holes *32* $2\frac{5}{32}$ Outer row rivet pitch at ends *4"* 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

The foregoing is a correct description.

Ruston & Hornsby Ltd Manufacturer.
per C. D. Parker

Dates of Survey ☒ During progress of work in shops *1931 Jan 2. 5. 13. 20*
☒ while building ☒ During erection on board vessel ☒

Is the approved plan of boiler forwarded herewith ☒ (If not state date of approval.)

Total No. of visits *4*

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

GENERAL REMARKS

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

This boiler has been built under special survey and is accordance with the approved plan as per Surveyor's letter of the 14th Jan'y, 1931. The materials and workmanship are good. The boiler has now been securely fitted on board the vessel, its safety valves adjusted under steam to working pressure. This boiler is eligible, in our opinion, to have notation T.N.D.B. 4, 31.

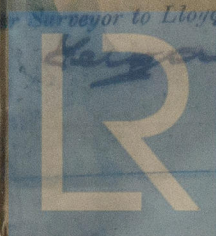
Survey Fee £ 4 : 4 : -
Travelling Expenses (if any) £ 2 : - : -

When applied for, *23/1/1931*
When received, *4/5/1931*

Committee's Minute *FRI. 24 APR 1931*
Assigned

FRI. 29 MAY 1931

W. G. Kinlay
Engine Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation