

REPORT ON BOILERS.

No. 17103

22 SEP 1941

Received at London Office

Date of writing Report 5/9/41 When handed in at Local Office 6/9/41 Port of Huddersfield

No. in Reg. Book 57 Survey held at Stockton-on-Tees Date, First Survey 25.7.41 Last Survey 29/8-1 1941

on the SSM Lybster VIC III (Number of Visits 4) Gross Tons _____ Net Tons _____

Built at Thorne By whom built R. Dunston Jr Yard No. 370 When built 1941

Engines made at Yarmouth By whom made Crafton (1931) Ltd Engine No. 627 When made 1941

Boilers made at Stockton By whom made Stockton CE & Riley Bros Ltd Boiler No. 6572 When made 1941

Owners The Admiralty Port belonging to _____

VERTICAL DONKEY BOILER.

Made at Stockton By whom made Stockton CE & Riley Bros Ltd Boiler No. 6572 When made 1941 Where fixed _____

Manufacturers of Steel Steel Co of Scotland, Appleby, Frodingham Steel Co Ltd

Total Heating Surface of Boiler 198 sq ft Is forced draught fitted CB Coal or Oil fired Coal

No. and Description of Boilers 1 - Vertical cross tube Working pressure 120 lbs

Tested by hydraulic pressure to 230 lbs Date of test 29th August 1941 No. of Certificate 7028

Area of Firegrate in each Boiler 23.75 sq ft No. and Description of safety valves to each boiler 2 Spring loaded

Area of each set of valves per boiler { per rule _____ as fitted _____ Pressure to which they are adjusted 120 lbs Are they fitted with easing gear Yes

State whether steam from main boilers can enter the donkey boiler Yes Smallest distance between boiler or uptake and bunkers or woodwork 15"

Is oil fuel carried in the double bottom under boiler Yes Smallest distance between base of boiler and tank top plating _____

Is the base of the boiler insulated Yes Largest internal dia. of boiler 6'-3" Height 14'-6"

Shell plates: Material Steel Tensile strength 29-33 tons Thickness 7/16"

Are the shell plates welded or flanged No Description of riveting: circ. seams SR long. seams T.R. (Lap)

Dia. of rivet holes in { circ. seams 15/16" Pitch of rivets 2.156 2.142 3.02 Percentage of strength of circ. seams { plate 56.50 rivets 58.20 of Longitudinal joint { plate 43.30 rivets 42.35 combined _____

Working pressure of shell by rules 120 lbs Thickness of butt straps { outer _____ inner _____

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

Tensile strength 26-30 tons Thickness 5/8" Radius 5'-0" (outside) Working pressure by rules 125 lbs

Description of Furnace: Plain, spherical, or dished crown Plain Material Steel Tensile strength 26-30 tons

Thickness 3/4" External diameter { top _____ bottom _____ Length as per rule _____ Working pressure by rules _____

Pitch of support stays circumferentially 24" and vertically 12" Are stays fitted with nuts or riveted over Riveted

Diameter of stays over thread 1 1/2" Radius of 5'-0" (outside) Working pressure by rule 137 lbs

Thickness of Ogee Ring _____ Diameter as per rule { D _____ a _____ Working pressure by rule _____

Combustion Chamber: Material Steel Tensile strength 26-30 tons Thickness of top plate 1 1/16"

Radius if dished 5'-0" 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 { front _____ back _____ Tensile strength { _____ Thickness { _____ Mean pitch of stay tubes in nests _____

If comprising shell, Dia. as per rule { front _____ back _____ Pitch in outer vertical rows { _____ Dia. of tube holes FRONT { stay _____ plain _____ BACK { stay _____ plain _____

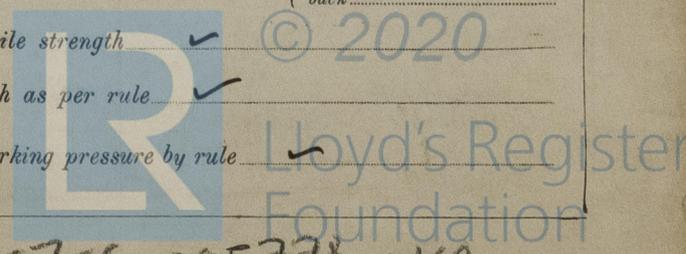
Is each alternate tube in outer vertical rows a stay tube _____ Working pressure by rules { front _____ back _____

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 _____

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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 tons Diameter at turned part, or over threads. 1/2" No. of threads per inch 9
 Area supported by each stay Working pressure by rules Are the stays drilled at the outer ends No
Tubes: Material External diameter plain stay Thickness
 No. of threads per inch Pitch of tubes Working pressure by rules
Manhole Compensation: Size of opening in shell plate 16" x 20" Section of compensating ring 5" x 3/4" No. of rivets and diameter
 of rivet holes 44 - 15/16" Outer row rivet pitch at ends 3 3/4" Depth of flange if manhole flanged
Uptake: External diameter 1' - 11" Thickness of uptake plate 5/8"
Cross Tubes: No. 5 External diameters 10 1/2" Thickness of plates 15/32"

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

For and on behalf of
 The foregoing is in accordance with the description,
 Geo. W. Miller
 Manufacturer.
 DIRECTOR.

Dates of Survey while building During progress of work in shops - -
 During erection on board vessel - -

Is the approved plan of boiler forwarded herewith 20/5/41
 (If not state date of approval.)

Total No. of visits

Is this Boiler a duplicate of a previous case. Yes If so, state Vessel's name and Report No. Ugbr Rpt 47085
Boiler no 65-70

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under Special Survey, in accordance with the Rule Requirements, & approved plan. The materials & workmanship are good, & on completion the boiler was tested by hydraulic pressure to 230 lbs/sq. & found tight & satisfactory. This boiler is being forwarded to Messrs Richard Dunston & Sons Ltd, Thorne, W. & Doncaster for installation on 66 ft. Puffer

Survey Fee £ 4 : 4 : } When applied for, 19.9 1941.
 Travelling Expenses (if any) £ : : } When received, 19

S. Wood & R. Westlake
 Engineer Surveyors, Lloyd's Register of Shipping

Committee's Minute TUE 17 FEB 1942
 Assigned See minute on Hull F.E

