

REPORT ON BOILERS.

No. 113326

Received at London Office

Date of writing Report 21-3-45

When handed in at Local Office

Port of

Sp. Quich

No. in
eg. Book

Survey held at Colchester & Rowledge

Date, First Survey 14 Feb 1944

Last Survey 17-11-1945

(Number of Visits 31)

Gross 146.9

on the

S.S. Coastal Light "VIC 78"

Tons

Net

Built at Rowledge

By whom built The Rowledge Ironworks Co. Ltd. Yard No. 657 When built 1945

Engines made at Rowledge

By whom made The Rowledge Ironworks Co. Ltd. Engine No. 671 When made 1945

Boilers made at Colchester

By whom made Denny, Papman & Co. Ltd. Boiler No. 20085 When made 1945

Owners

Ministry of War Transport

Port belonging to London

VERTICAL DONKEY BOILER.

Made at Colchester By whom made Denny, Papman & Co. Ltd. Boiler No. 20085 When made 1945 Where fixed Engine Room

Manufacturers of Steel Appleby - Frodingham Steel Co. Ltd.

Total Heating Surface of Boiler 504 sq ft Is forced draught fitted No Coal or Oil fired Coal

No. and Description of Boilers One - Papmans Vertical Working pressure 120 lbs

Tested by hydraulic pressure to 230 lbs Date of test 7-11-45 No. of Certificate 1406

Area of Firegrate in each Boiler 23.75 sq ft No. and Description of safety valves to each boiler One - double spring loaded

Area of each set of valves per boiler { per rule 4.60 as fitted 6.28 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

Is oil fuel carried in the double bottom under boiler No Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated No Largest internal dia. of boiler 6'-6" Height 14'-3 3/16"

Shell plates: Material Steel Tensile strength 28/32 ton Thickness 17/32"

Are the shell plates welded or flanged No Description of riveting: circ. seams { end S.R.L. inter D.R.L. long. seams D.R.D.B.S.

Dia. of rivet holes in { circ. seams 15/16 Pitch of rivets 2 1/4 + 3 1/4 Percentage of strength of circ. seams { plate 58 + 71 rivets 47.5 + 65 of Longitudinal joint { plate 70.4 rivets 65 combined

Working pressure of shell by rules Thickness of butt straps { outer 17/32 + 13/32 inner 17/32 + 13/32

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

Tensile strength 26/30 ton Thickness 3/4" Radius 6'-0" Working pressure by rules

Description of Furnace: Plain, spherical, or dished crown Yes Material Steel Tensile strength 26.32 ton

Thickness 5/8" External diameter { top Length as per rule Working pressure by rules

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 39" Working pressure by rule

Thickness of Ogee Ring 7/8" Diameter as per rule { D 6'-6" a 5'-7" Working pressure by rule

Combustion Chamber: Material Steel Tensile strength 26/30 ton Thickness of top plate

Radius if dished Working pressure by rule Thickness of back plate Diameter if circular 5'-4"

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 Steel Tensile strength { 26/30 ton Thickness { 13/16 Mean pitch of stay tubes in nests 10 5/8"

If comprising shell, Dia. as per rule { front Pitch in outer vertical rows { 8 1/4" Dia. of tube holes FRONT { stay 2 1/2" plain 2 3/8" BACK { stay 2 1/4" plain

Is each alternate tube in outer vertical rows a stay tube Yes 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

005756-005778-0278

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 Steel External diameter ☒ plain 2 1/4" Thickness ☒ 10 SWG 1/4"
 No. of threads per inch 9 Pitch of tubes 3 1/4" x 4 1/8" Working pressure by rules ☒
Manhole Compensation: Size of opening in shell plate 16 1/4" x 19 1/4" Section of compensating ring 5" x 1" No. of rivets and diameter
 of rivet holes 36 - 15/16" Outer row rivet pitch at ends 4 1/2" Depth of flange if manhole flanged 3"
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,



Manufacturer.

Dates of Survey while building
 During progress of work in shops - 1944: FEB 14, 24 MAR 16 MAY 22, 30 JUN 17, 22 JUL 12
 During erection on board vessel - 1945: JAN 22 FEB 8, 20, 25 MAR 9, 19, 30 APR 13 MAY 25 JUNE 12
1945: AUG 10, 26, 31 SEP 11, 14 OCT 3, 11, 17 NOV 17

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

Total No. of visits 31

Is this Boiler a duplicate of a previous case ☒ If so, state Vessel's name and Report No. "VIC 76" & "VIC 77"
note "VIC 78" has alteration to fire hole opening.
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The Boiler has been constructed under Special Survey in accordance with the approved plan & amended plan and Secretary's letter.
 The materials & workmanship are of good description.
 The Boiler has been fitted efficiently on board this vessel, examined under working conditions & its safety valves adjusted under steam to 120 lbs. D.

Survey Fee ... £ 4 : 4 : 0 When applied for, 19...
 Travelling Expenses (if any) £ 3 : 19 : 9 When received, 19...

Committee's Minute FRI. 14 DEC 1945
 Assigned Sir F.E. Machy. rph.

J. Byrrell -
 Engineer Surveyor to Lloyd's Register of Shipping.

