

REPORT ON BOILERS.

No. 93968

Received at London Office

12 JUN 1929

Date of writing Report June 29 1929 When handed in at Local Office 12 JUN 1929 Port of London

No. in Survey held at Stitchius Date, First Survey 16th May 1929 Last Survey June 3rd 1929
 Reg. Book + Bristol

40154 on the Newnes Hopwood Patent Boilers (Number of Visits Four) Gross 684.07
for the T.S. Motor vessel "ELKHOUND" Tons Net 201

Built at Bristol By whom built Chas. Hill & Co. Yard No. 173 When built 1929

Engines made at Augsburg By whom made M.A.N. Engine No. _____ When made 1918

Boilers made at Hutchin By whom made Spencer Hopwood Ltd. Boiler No. 9738 When made 1929

Owners Channel Tankers Ltd Port belonging to London

VERTICAL DONKEY BOILER.

Made at Stitchius By whom made Newnes Hopwood Boiler No. 9738 When made 1929 Where fixed _____

Manufacturers of Steel Newnes Hopwood & Co.

Total Heating Surface of Boiler 112 sq ft Is forced draught fitted no Coal or Oil fired oil

No. and Description of Boilers one No. 10 Squal Newnes Hopwood Patent Working pressure 120 lbs

Tested by hydraulic pressure to 230 lbs Date of test 3-6-29 No. of Certificate 1342

Area of Firegrate in each Boiler 9.6 sq ft No. and Description of safety valves to each boiler Adjusting washer A5/6 F32 Spring loaded. (Two)

Area of each set of valves per boiler per rule 1.331 as fitted 3.52 sq ft 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 _____ 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'-0" Height 7'-3"

Shell plates: Material Steel Tensile strength 28-32 Thickness 3/4"

Are the shell plates welded or flanged _____ Description of riveting: circ. seams { end SR long. seams BR } inter. _____

Dia. of rivet holes in { circ. seams 13/16 } Pitch of rivets { 2" } Percentage of strength of circ. seams { plate 59% of Longitudinal joint { rivets 55% } { plate 68.5% } { rivets 86% } { combined _____ }

Working pressure of shell by rules 129 lbs Thickness of butt straps { outer _____ } inner _____

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

Tensile strength 26-30 Thickness 9/16" Radius _____ Working pressure by rules 120

Description of Furnace: Plain, spherical, or dished crown _____ Material _____ Tensile strength _____

Thickness _____ 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 _____ Working pressure by rule _____

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

Combustion Chamber: Material Steel Tensile strength 26-30 Thickness of top plate 9/16"

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 { front Steel } Tensile strength { 26-30 } Thickness { 1/2" } Mean pitch of stay tubes in nests 10 tubes

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



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 Solid drawn steel External diameter { plain 2 1/4" stay 2 1/4" Thickness { 11 Swg. 3/16"
 No. of threads per inch 11 Pitch of tubes 3 1/4" x 2 23/32" Working pressure by rules 170

Manhole Compensation: Size of opening in shell plate 14 x 11 Section of compensating ring 6 1/2" x 1/2" No. of rivets and diameter of rivet holes 24 - 13/16 Outer row rivet pitch at ends 5 1/2" Depth of flange if manhole flanged _____

Uptake: External diameter 1' 2 3/4" Thickness of uptake plate 1/2"

Cross Tubes: No. _____ External diameters { _____ Thickness of plates _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with Yes

SPENCER-HOPWOOD, LTD.
The foregoing is a correct description,

J. Bradley Manufacturer.
WORKS MANAGER

Dates of Survey { During progress of work in shops - - } 1929 May 16, 23, 27 June 9 Is the approved plan of boiler forwarded herewith Yes
 (If not state date of approval.)
 { During erection on board vessel - - } 1929 Aug. 6, Sept. 19, Oct. 8, 15, Total No. of visits 4 (In Shops) 4 (On Board)

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

This boiler has been built under special survey in accordance with the plan & the Society's Rules. The steel used in its construction has been tested in accordance with the Rules. The workmanship is good. Upon completion the boiler was tested by hydraulic pressure to 320 lbs per sq inch and showed no signs of weakness or defect. The boiler is marked

*No. 1342
 Hydro test
 220 lbs
 60 P 120 lbs
 3-6-29 H.P.C.*

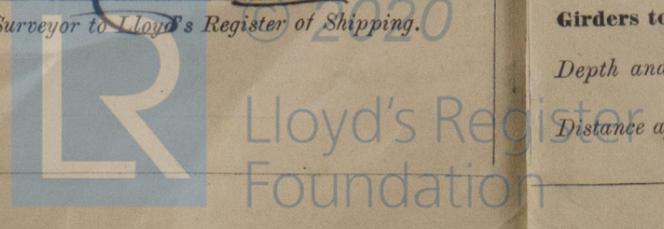
This boiler has now been fitted & secured on board the Motor vessel "Elkhound" according to the Rules. Water under steam found satisfactory.

John W. Gwynne

Survey Fee £ 4 4 :) When applied for, _____ 19 _____
 Travelling Expenses (if any) £ 1 - 5 - 6) When received, Aug 15th 19 29
 London.

H. Cornish
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 12 NOV 1929
 Assigned See Pro Sppt. No 12582



Date of writing _____
 No. in Reg. Book 40154 on p. _____
 Built at _____
 Engines made _____
 Boilers made _____
 Owners _____
 VERTICAL
 Made at _____
 Manufacturer _____
 Total Heating _____
 No. and Description _____
 Tested by hydro _____
 Area of Fire _____
 Area of each _____
 State whether _____
 or woodwork _____
 Shell plates _____
 Are the shell _____
 Dia. of rivet _____
 Working pressure _____
 Shell Crown _____
 Tensile strength _____
 Description _____
 Thickness _____
 Pitch of stay _____
 Diameter of _____
 Thickness of _____
 Combustion _____
 Radius of _____
 Length as per _____
 Diameter of _____
 Tube Plate _____
 If comprising _____
 Is each alternate _____
 Girders to _____
 Depth and _____
 Distance apart _____