

REPORT ON BOILERS.

No. 10597^{dl.}

Received at London Office 16 MAY 1927

Writing Report 5 May 1927 When handed in at Local Office 1927 Port of **AMSTERDAM**

in Surrey held at **AMSTERDAM** Date, First Survey 1/4 1926 Last Survey 3/5 1927 1927

90 on the **Steel Twin Screw Steamer "A L E T T A"** (Number of Visits 8) Gross Tons - Net Tons -

Built at **Dundee** By whom built **Caledon Shipb. Co. Ltd.** Yard No. 308 When built 1927

ines made at **Amsterdam** By whom made **Werkspoor** Engine No. - When made 1927

ers made at **Amsterdam** By whom made **Werkspoor** Boiler No. - When made 1927

inal Horse Power 380 Owners **Anglo-Saxon Petroleum Co. Ltd.** Port belonging to -

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel **Henschel, John & Co. Ltd. Hamburg** (Letter for Record **S.**)

Total Heating Surface of Boilers **925 sq. ft.** Is forced draught fitted **No.** Coal or Oil fired

Description of Boilers **Horizontal Marine Boilers** Working Pressure **150 lb.**

Tested by hydraulic pressure to **275 lb.** Date of test **2.11.26** No. of Certificate **327** Can each boiler be worked separately **L**

No. and Description of safety valves to each boiler **Two Spring loaded**

Pressure to which they are adjusted **150 lb.** Are they fitted with easing gear **Yes**

Use of donkey boilers, state whether steam from main boilers can enter the donkey boiler **L**

Least distance between boilers or uptakes and bunkers or woodwork **over 18"** Is oil fuel carried in the double bottom under boilers **L**

Least distance between shell of boiler and tank top plating **top of tank** Is the bottom of the boiler insulated **Yes**

Least internal dia. of boilers **9' 10"** Length **9' 8"** Shell plates: Material **Steel** Tensile strength **29-35 tons**

Thickness **25/32"** Are the shell plates welded or flanged **No** Description of riveting: circ. seams **Abt. rivets**

Diameter of rivet holes in circ. seams **1"** Pitch of rivets **5 1/8"**

Percentage of strength of circ. end seams: plate **40%** rivets **44%** Percentage of strength of circ. intermediate seam: plate **L** rivets **L**

Percentage of strength of longitudinal joint: plate **80.8%** rivets **80.5%** combined **82%** Working pressure of shell by Rules **165 lb.**

Thickness of butt straps: outer **23/32"** inner **23/32"** No. and Description of Furnaces in each Boiler **2 Marine**

Material **Steel** Tensile strength **26-30 tons** Smallest outside diameter **32 1/2"**

Thickness of plates: crown **4/16"** bottom **4/16"** Description of longitudinal joint **Welded**

Working pressure of furnace by Rules **190 lb.**

Plates in steam space: Material **Steel** Tensile strength **26-30 tons** Thickness **15/16"** Pitch of stays **15" x 15"**

Are stays secured **Abt. rivets** Working pressure by Rules **180 lb.**

Plates: Material **Steel** Tensile strength **26-30 tons** Thickness **5/4"**

Pitch of stay tubes in nests **10 1/2"** Pitch across wide water spaces **14 1/4"** Working pressure: front **165 lb.** back **180 lb.**

Plates to combustion chamber tops: Material **Steel** Tensile strength **28-32 tons** Depth and thickness of girder

Length as per Rule **23 1/2"** Distance apart **4 1/2"** No. and pitch of stays

Working pressure by Rules **190 lb.** Combustion chamber plates: Material **Steel**

Thickness: Sides **4 3/4"** Back **4 3/4"** Top **4 3/4"** Bottom **4 3/4"**

Are stays fitted with nuts or riveted over **with nuts**

Working pressure by Rules **158 lb.** Front plate at bottom: Material **Steel** Tensile strength **26-30 tons**

Thickness **15/16"** Lower back plate: Material **Steel** Tensile strength **26-30 tons** Thickness **15/16"**

Are stays fitted with nuts or riveted over **with nuts**

Working Pressure **300 lb.** Main stays: Material **Steel** Tensile strength **28-32 tons**

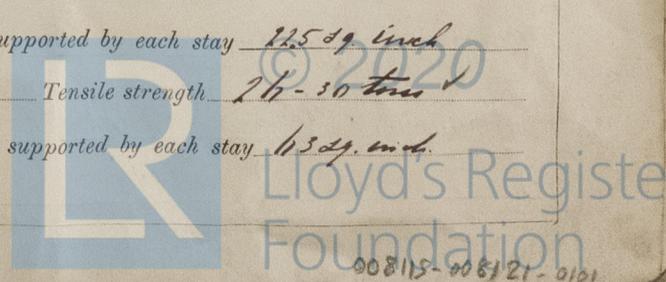
At body of stay, No. of threads per inch **8** Area supported by each stay **22.5 sq. inch**

Over threads **2 3/8"** Screw stays: Material **Steel** Tensile strength **26-30 tons**

Working pressure by Rules **185 lb.**

At turned off part, No. of threads per inch **11** Area supported by each stay **43 sq. inch**

Over threads **1 3/8"**



Working pressure by Rules *145 lb* Are the stays drilled at the outer ends *Yes* Margin stays: Diameter *At turned off part, 1 1/2"* or *Over threads 1 1/2"*

No. of threads per inch *11* Area supported by each stay *81 sq. inch* Working pressure by Rules *165 lb*

Tubes: Material *Lap welded iron* External diameter *Plain 2 3/4"* Stay *2 3/4"* Thickness *5/16"* No. of threads per inch *11*

Pitch of tubes *5 15/16" x 3 15/16"* Working pressure by Rules *215 lb* Manhole compensation: Size of opening *16 1/2"*

shell plate *14 1/2" x 18 1/2"* Section of compensating ring *16 1/4 inch* No. of rivets and diameter of rivet holes *40 - 1/8"*

Outer row rivet pitch at ends *4 1/2"* Depth of flange if manhole flanged *3"* Steam Dome: Material *Iron*

Tensile strength *Iron* Thickness of shell *Iron* Description of longitudinal joint *Iron*

Diameter of rivet holes *Iron* Pitch of rivets *Iron* Percentage of strength of joint *Plate Iron Rivets Iron*

Internal diameter *Iron* Working pressure by Rules *Iron* Thickness of crown *Iron* No. and diameter of stays *Iron*

Inner radius of crown *Iron* Working pressure by Rules *Iron*

How connected to shell *Iron* Size of doubling plate under dome *Iron* Diameter of rivet holes and of rivets in outer row in dome connection to shell *Iron*

Type of Superheater *W. Superheater* Manufacturers of *Tubes Iron Steel castings Iron*

Number of elements *Iron* Material of tubes *Iron* Internal diameter and thickness of tubes *Iron*

Material of headers *Iron* Tensile strength *Iron* Thickness *Iron* Can the superheater be shut off from the boiler *Iron*

the boiler be worked separately *Iron* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *Iron*

Area of each safety valve *Iron* Are the safety valves fitted with easing gear *Iron* Working pressure as Rules *Iron* Pressure to which the safety valves are adjusted *Iron* Hydraulic test pressure *Iron*

tubes *Iron* castings *Iron* and after assembly in place *Iron* Are drain cocks or valves fitted to free the superheater from water where necessary *Iron*

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

The foregoing is a correct description,

WERKSPOR
H. J. Appin

Dates of Survey *During progress of work in shops - 1/4, 13/4, 9/8, 23/9, 11/10, 2/11, 10/3, 3/5*
while building - During erection on board vessel - 1/3, 3/5

Are the approved plans of boiler and superheater forwarded herewith, *Not submitted*
(If not state date of approval.) *London office*
Total No. of visits *8* *E. 15-4-26*

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

The boiler has been made under Special License, in accordance with the approved plan and Secretary's letter, material tested as required and workmanship good.

Survey Fee ... *£ 44.40* : :
Travelling Expenses (if any) £ : :
When applied for, *192* *192*
When received, *2/6/192* *192*

H. N. Bennett
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **FRI. 20 MAY 1927**
Assigned *See Dan's Rpt attached*

