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**REPORT ON BOILERS.**

Received at London Office 20 MAR 1931

Date of writing Report 2nd Jan. 1931. When handed in at Local Office 1931 Port of **AMSTERDAM**

No. in Reg. Book. Survey held at **AMSTERDAM** Date, First Survey 7th April Last Survey 21st August 1930.

on the M.V. "**ALDEGONDA**" (Number of Visits 7) Tons Gross - Net -

Master - Built at **Schiedam** By whom built **Werf "Gusto"** Yard No. **652** When built **1931**  
Engines made at **Amsterdam** By whom made **N.V. Werkspoor** Engine No. - When made **1931**  
Boilers made at **Amsterdam** By whom made **N.V. Werkspoor** Boiler No. - When made **1931**  
Nominal Horse Power **2 x 143** Owners **Anglo Saxon Petroleum Co.** Port belonging to **London**

**MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.**

Manufacturers of Steel **Menschel** (Letter for Record **S.**)

Total Heating Surface of Boilers **925 sq. ft.** Is forced draught fitted **Yes** Coal or Oil fired **oil fired**

No. and Description of Boilers **Horizontal marine boilers** Working Pressure **150 lbs.**

Tested by hydraulic pressure to **275 lbs.** Date of test **2-1-30** No. of Certificate **368** Can each boiler be worked separately -

Area of Firegrate in each Boiler - No. and Description of safety valves to each boiler **Two spring loaded**

Area of each set of valves per boiler **per Rule 8.4 sq. inch** as fitted **4** Pressure to which they are adjusted **150 lb.** Are they fitted with easing gear **Yes.**

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **Yes**

Smallest distance between boilers or uptakes and bunkers or woodwork **Yes** Is oil fuel carried in the double bottom under boilers **Yes**

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

Largest internal dia. of boilers **9' - 10"** Length **9' - 8"** Shell plates: Material **S. M. Steel** Tensile strength **29-33 tons**

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

long. seams **dbl. butt top, dbl. riv.** Diameter of rivet holes in **1"** Pitch of rivets **5 1/8"**

Percentage of strength of circ. end seams **plate 70% rivets 44%** Percentage of strength of circ. intermediate seam **plate - rivets -**

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

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

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

Length of plain part **top - bottom -** Thickness of plates **crown 3 7/16" bottom -** Description of longitudinal joint **Welded**

Dimensions of stiffening rings on furnace or c.c. bottom **Yes** Working pressure of furnace by Rules **190 lbs**

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

How are stays secured **dbl. nuts** Working pressure by Rules **180 lbs**

Tube plates: Material **Steel** Tensile strength **26-30 tons** Thickness **3/4"**

Mean pitch of stay tubes in nests **10 1/2"** Pitch across wide water spaces **14 7/8"** Working pressure **front 165 lbs back 180**

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

at centre **6" x 1 1/4"** Length as per Rule **23 1/2"** Distance apart **7 1/2"** No. and pitch of stays

in each **2 - 7 7/8"** Working pressure by Rules **190 lbs** Combustion chamber plates: Material **Steel**

Tensile strength **26-30 tons** Thickness: Sides **21.5/32"** Back **21.5/32"** Top **21.5/32"** Bottom **21.5/32"**

Pitch of stays to ditto: Sides **7 1/16" x 7 7/8"** Back **8 1/4" x 7 5/8"** Top **7 1/8" x 7 1/2"** Are stays fitted with nuts or riveted over **riveted over**

Working pressure by Rules **158 lbs.** 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"**

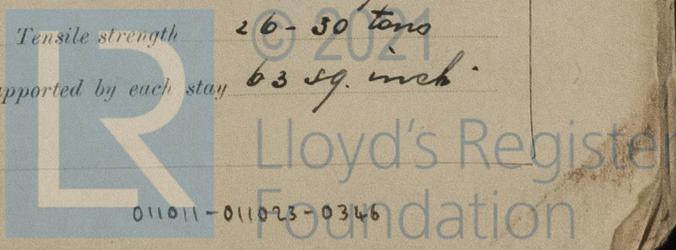
Pitch of stays at wide water space **7 5/8" x 13"** Are stays fitted with nuts or riveted over **nutted**

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

Diameter **At body of stay, or Over threads** **2 3/8"** No. of threads per inch **8** Area supported by each stay **225 sq. inch**

Working pressure by Rules **185 lbs** Screw stays: Material **Steel** Tensile strength **26-30 tons**

Diameter **At turned-off part, or Over threads** **1 3/8"** No. of threads per inch **11** Area supported by each stay **63 sq. inch**



5-4 12140

Working pressure by Rules *175 lbs* Are the stays drilled at the outer ends *Yes* Margin stays: Diameter <sup>At turned off part.</sup> *1 1/2"*  
 No. of threads per inch *11* Area supported by each stay *81 sq. inch* Working pressure by Rules *165 lbs.*  
 Tubes: Material *iron/lap welded* External diameter <sup>Plain</sup> *2 3/4"* Thickness <sup>N. #9</sup> *5/16"* No. of threads per inch *11*  
 Pitch of tubes *3 5/16" x 3 5/16"* Working pressure by Rules *215 lbs* Manhole compensation: Size of opening in  
 shell plate *14 1/2" x 18 1/2"* Section of compensating ring *16 sq. inch* No. of rivets and diameter of rivet holes *40-1 1/8"*  
 Outer row rivet pitch at ends *7 1/2"* Depth of flange if manhole flanged *3"* Steam Dome: Material *-*  
 Tensile strength *-* Thickness of shell *-* Description of longitudinal joint *-*  
 Diameter of rivet holes *-* Pitch of rivets *-* Percentage of strength of joint <sup>Plate</sup> *-*  
 Internal diameter *-* Working pressure by Rules *-* Thickness of crown *-* No. and diameter of  
 stays *-* Inner radius of crown *-* Working pressure by Rules *-*  
 How connected to shell *-* Size of doubling plate under dome *-* Diameter of rivet holes and pitch  
 of rivets in outer row in dome connection to shell *-*

Type of Superheater *-* Manufacturers of <sup>Tubes</sup> *-* <sup>Steel castings</sup> *-*  
 Number of elements *-* Material of tubes *-* Internal diameter and thickness of tubes *-*  
 Material of headers *-* Tensile strength *-* Thickness *-* Can the superheater be shut off and  
 the boiler be worked separately *-* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *-*  
 Area of each safety valve *-* Are the safety valves fitted with easing gear *-* Working pressure as per  
 Rules *-* Pressure to which the safety valves are adjusted *-* Hydraulic test pressure:  
 tubes *-* castings *-* and after assembly in place *-* Are drain cocks or valves fitted  
 to free the superheater from water where necessary *-*

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

The foregoing is a correct description,  
*Werkspool* Manufacturer.

Dates of Survey <sup>During progress of work in shops - -</sup> *2/4. 22/4. 28/5. 3/6. 16/7. 18/8. 21/8* Are the approved plans of boiler and superheater forwarded herewith *Retained in*  
 while building <sup>During erection on board vessel - - -</sup> *Secretary F.S.S. 30.*  
 Total No. of visits *7*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)  
*The boiler has been constructed under Special Survey, in accordance with the Rules, Secretary's letters and approved plans. It is tested as required and workmanship good.*

*The boiler has been fitted on board, and safety valves adjusted to 150 lb.*  
*M. Young*

Survey Fee ... £ *10 on march* Report  
 Travelling Expenses (if any) £ : : When received, 192

*F. N. Bernotti*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUE. 31 MAR '31**  
 Assigned *Sec F. C. Rpt.*

