

No. 8048 B  
20 MAY 1961

# REPORT ON BOILERS.

pt. 5b.

Received at London Office.....

Date of writing Report 15.5. 1961 When handed in at Local Office 19 Port of Helsingfors

No. in Reg. Book. 93394 on the m.v. "PARANAGUA" Survey held at Helsinki Date, First Survey 24.2.61 Last Survey 28.4. 19 61  
(Number of Visits 5) Tons Gross 4000 Net

Built at Helsinki By whom built Valmet Oy, Helsingin Telakka Yard No. 203 When built 1961-4

Engines made at Rautpohja By whom made Valmet Oy Engine No. 103 When made 1960

Boilers made at Gothenburg By whom made AB Lindholmens Varv Boiler No. 3452 When made 1960

Owners Commissao de Marinha Mercante Port belonging to Rio de Janeiro

## VERTICAL BOILER.

Made at By whom made Boiler No. When made Where fixed Helsingfors

Manufacturers of Steel

Total Heating Surface of each Boiler Is forced draught fitted No Coal or Oil fired

No. and Description of Boilers Working Pressure

Tested by hydraulic pressure to Date of test No. of Certificate

Area of fire grate in each Boiler No. and description of safety valves to each boiler

Area of each set of valves per boiler { per Rule..... Pressure to which they are adjusted 100 lbs. Are they fitted with easing gear. yes  
as fitted.....

State whether steam from main boilers can enter the donkey boiler No main boiler Smallest distance between boiler or uptake and bunkers

Boiler situated in the engine's oil fuel carried in the double bottom under boiler. Smallest distance between base of boiler and tank top plating casing.

Is the base of the boiler insulated Largest internal dia. of boiler Height

Shell plates: Material Tensile strength Thickness

Are the shell plates welded or flanged If fusion welded, state name of welding firm

Have all the requirements of the Rules for Class I vessels been complied with Description of riveting: circ. seams { end.....  
inter.....

long. seams Dia. of rivet holes in { circ. seams..... Pitch of rivets { Thickness of butt straps { outer.....  
long. seams..... inner.....

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Material Tensile strength Thickness

Radius Description of Furnace: Plain, spherical, or dished crown Material

Tensile strength Thickness External diameter { top..... Length as per Rule  
bottom.....

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

Thickness of Ogee Ring Diameter as per Rule { D.....  
d.....

Combustion Chamber: Material Tensile strength Thickness of top plate

Radius if dished 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

Tube Plates: Material { front..... Tensile strength { Thickness { Mean pitch of stay tubes in nests  
back.....

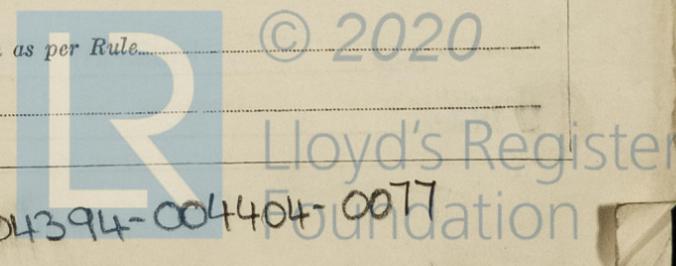
If comprising shell, dia. as per Rule { front..... Pitch in outer vertical rows { Dia. of tube holes FRONT { stay..... BACK { stay.....  
back..... plain..... plain.....

Is each alternate tube in outer vertical rows a stay tube

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



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Crown Stays: Material..... Tensile strength..... Diameter { at body of stay,.....  
or  
over threads.....

No. of threads per inch..... Screw Stays: Material..... Tensile strength.....

Diameter { at turned off part,.....  
or  
over threads..... No. of threads per inch..... Are the stays drilled at the outer ends.....

Tubes: Material..... External diameter { plain.....  
stay..... Thickness { .....

No. of threads per inch..... Pitch of tubes.....

Manhole Compensation: Size of opening in shell plate..... Section of compensating ring..... No. of rivets and diameter

of rivet holes..... Outer row rivet pitch at ends..... Depth of flange if manhole flanged.....

Uptake: External diameter..... Thickness of uptake plate.....

Cross Tubes: No..... External diameters { .....

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 { During progress of work in shops - - }  
while building { During erection on board vessel - - - }  
24.2.-28.4.61  
Is the approved plan of boiler forwarded herewith.....  
(If not state date of approval.)  
Total No. of visits..... 5

Is this Boiler a duplicate of a previous case..... Yes..... If so, state Vessel's name and Report No. m.v. "GUANABARA", Report No. 7613 B.

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

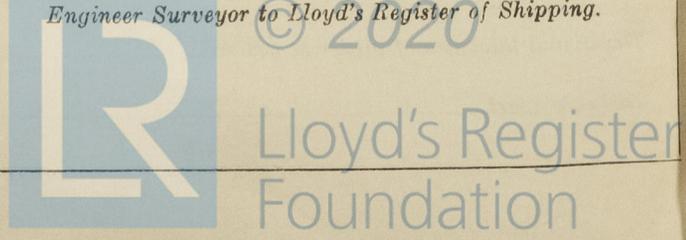
This Boiler has been surveyed during installation and steam trials on board the ship and thereby found good.

Survey Fee ... .. £ : : When applied for..... 19  
Travelling Expenses (if any) £ : : When received..... 19

*J. G. Elliott* *A. J. Curtis* *J. W. Chen*  
Engineer Surveyor to Lloyd's Register of Shipping.

Date..... THURSDAY 13 JUL 1961

Committee's Minute.....



MADE AND PRINTED IN GREAT BRITAIN WITH YOUR FIRST ENTRY.