

# REPORT ON BOILERS.

Received at London Office **MON. 1 MAY 1922**

Date of writing Report **Mar. 11th. 1922** When handed in at Local Office **191** Port of **Hong Kong**

No. in Survey held at **Hong Kong** Date, First Survey **10-1-21** Last Survey **Mar. 7th. 1922**

Req. Book. **on the Steel Screw Steamer "PETRICOLA"** (Number of Visits **20**) Tons **Gross 5818.86**  
**Net 3491.36**

Master **Built at Hong Kong** By whom built **HongKong & Whampoa Dock Co. Ltd.** When built **1922**

Engines made at **Hong Kong** By whom made **HongKong & Whampoa Dock Co. Ltd.** When made **1922**

Boilers made at **Hong Kong** By whom made **HongKong & Whampoa Dock Co. Ltd.** When made **1922**

Registered Horse Power **517** Owners **Anglo-Saxon Petroleum Co. Ltd.** Port belonging to **Hong Kong**

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **Wm. Beardmore & Co.**

Letter for record **EY8/9/20** Total Heating Surface of Boilers **1228.7 sq. ft.** Is forced draft fitted **No** No. and Description of Boilers **One Cylindrical Multitubular** Working Pressure **120 lbs.** Tested by hydraulic pressure to **230 lbs.** Date of test **8-11-21**

No. of Certificate **124** Can each boiler be worked separately **Yes** Area of fire grate in each boiler **33.3 sq. ft.** and Description of Safety valves to each boiler **Two 2" spring loaded** Area of each valve **3.1416 sq. in.** Pressure to which they are adjusted **120 lbs.** Are they fitted with easing gear **Yes** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **No**

Smallest distance between boilers or pipes and bunkers or woodwork **5ft. Up. Dk.** Boiler on **Boiler on** Mean dia. of boilers **11'-6"** Length **11'- $\frac{1}{4}$ "**

Material of shell plates **Steel** Thickness  **$\frac{3}{4}$ "** Range of tensile strength **28-32 Tons** Are the shell plates welded or flanged **No**

Description of riveting: cir. seams **double lap** long. seams **Triple butt** Diameter of rivet holes in long. seams  **$\frac{15}{16}$ "** Pitch of rivets **5,  $\frac{11}{16}$ "**

Gap of plates or width of butt straps  **$14\frac{1}{4}$ "** Per centages of strength of longitudinal joint rivets **96.5%** Working pressure of shell by rules **135 lbs.** Size of manhole in shell **16" x 12"** Size of compensating ring **30" x 34" x  $\frac{3}{4}$ "** No. and Description of Furnaces in each boiler **Two Deighton** Material **Steel** Outside diameter **44 $\frac{1}{2}$ "** Length of plain part top **-** Thickness of plates crown **13/32"** bottom **-**

Description of longitudinal joint **Welded** No. of strengthening rings **-** Working pressure of furnace by the rules **141 lbs.** Combustion chamber plates: Material **Steel** Thickness: Sides **19/32"** Back **19/32"** Top **19/32"** Bottom **3"** Pitch of stays to ditto: Sides **7 $\frac{1}{8}$ " x 8 $\frac{1}{2}$ "** Back **7 $\frac{1}{8}$ " x 8 $\frac{1}{2}$ "**

Material of stays **Steel** Diameter at smallest part **2.16"**

Working pressure by rules **122 lbs.** Material of stays **Steel** Diameter at smallest part **2.16"**

Material of Front plates at bottom **Steel** Thickness **25/32"** Material of lower back plate **Steel** Thickness **11/16"** Greatest pitch of stays **13"** Working pressure of plate by rules **B.134** Diameter of tubes **3"**

Pitch of tubes **4 $\frac{1}{8}$ " x 4 $\frac{1}{4}$ "** Material of tube plates **Steel** Thickness: Front **25/32"** Back **21/32"** Mean pitch of stays **12 $\frac{3}{8}$ " x 8 $\frac{1}{2}$ "** Pitch across wide inter spaces **13 $\frac{1}{2}$ "** Working pressures by rules **Space 149 "** Girders to Chamber tops: Material **Steel** Depth and thickness of girder at centre **7" x  $\frac{3}{4}$ " double** Length as per rule **32 $\frac{1}{4}$ "** Distance apart **8 $\frac{1}{4}$ "** Number and pitch of Stays in each **Three 8 $\frac{1}{2}$ "**

Working pressure by rules **133 lbs.** Superheater or Steam chest: how connected to boiler **-** Can the superheater be shut off and the boiler worked separately **-** Diameter **-** Length **-** Thickness of shell plates **-** Material **-** Description of longitudinal joint **-** Diam. of rivets **-** Pitch of rivets **-** Working pressure of shell by rules **-** Diameter of flue **-** Material of flue plates **-** Thickness **-** stiffened with rings **-** Distance between rings **-** Working pressure by rules **-** End plates: Thickness **-** How stayed **-** Working pressure of end plates **-** Area of safety valves to superheater **-** Are they fitted with easing gear **-**

**HONGKONG & WHAMPOA DOCK Co., Ltd.**  
The foregoing is a correct description,  
**F. H. Dyer** Manufacturer.

Dates During progress of work in shops - - **January 10th 1921** to **March 7th. 1922** while building board vessel - - -

Is the approved plan of boiler forwarded herewith **No.**

Total No. of visits **20**

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

Intended for coal or oil fuel, boiler fixed in upper deck.  
Thickness of safety valves washers:  **$\frac{3}{8}$ " both.**

### IDENTIFICATION MARKS ON BOILER:—

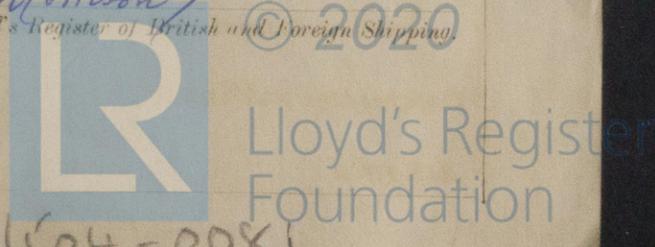
No. 124 HKG.  
LLOYD'S TEST  
230 lbs.  
W.P. 120 lbs.  
8-11-21  
T. S. M.

per Rpt. 4.  
Survey Fee ... **\$71.00** : When applied for, **7/3 22**  
Travelling Expenses (if any) £ : : When received, **18.4. 1922**

**J. S. Morrison**  
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **FRI. 5 MAY 1922**

Assigned **See Minutes on Report.**



W504-0081  
W504-0082