

# REPORT ON BOILERS.

No. 8391  
AUG 21 1939

Received at London Office

Date of writing Report 11<sup>th</sup> July 1939 When handed in at Local Office 11<sup>th</sup> July 1939 Port of Hongkong  
 No. in Survey held at Hongkong Date, First Survey May 15<sup>th</sup> Last Survey July 7<sup>th</sup> 1939  
 Reg. Book. 90267 on the Steel Twin Screw Motorship "TULAGI" (Number of Visits 7) Tons { Gross 2280.94  
 Net 1679.79  
 Master \_\_\_\_\_ Built at Hongkong By whom built Hongkong + Whampoa Dock Co. Ltd When built 1939  
 Boiler made at Annan By whom made Cochran + Co. Annan Ltd (No. 14124) When made 1938  
 Owners Burns Philp (South Sea) Co. Ltd Port belonging to Hongkong

**VERTICAL DONKEY BOILER**— No. One Description Cochran Manufacturers of steel Consell Iron Co. Ltd  
 Made at Annan By whom made Cochran + Co. Annan Ltd When made 1938 Where fixed at For<sup>nd</sup> end of engine casing Working pressure 100 lbs  
 tested by hydraulic pressure to 200 Date of test 27/10/38 No. of Certificate 20294 Fire grate area 12.5 sq ft Description of safety valves Enclosed Spring  
 No. of safety valves 2 Area of each 3.14 sq ft Pressure to which they are adjusted 100 lbs If fitted with easing gear yes If steam from main boilers can enter the donkey boiler None Diameter of donkey boiler 5'-0" Length 11'-3" Material of shell plates Steel Thickness 3/32" + 1/32"  
 Range of tensile strength 28-32 Tons Description of riveting long. seams D. R. Lap Diameter of rivet holes 25/32" Whether punched or drilled drilled Pitch of rivets 2.61", 2.60", 2.42" Lap of plating 3 7/8" Per centage of strength of joint 74.15 Working pressure of shell by rules 119 lbs Thickness of shell crown plates 21/32" + 3/8" Radius of do. 2'-6" No. of stays to do. ✓ Diameter of stays ✓ Diameter of furnace—Top ✓ Bottom 4'-3" Length of furnace ✓ Thickness of furnace side plates 1/2" Description of joint Seamless Working pressure of furnace by rules 162 lbs Thickness of Ogee ring 21/32" Working pressure of Ogee ring by rules 103 lbs Thickness of furnace crown plates 1/2" Radius of do. 2'-1 1/2" Stayed by Hemisphere Diameter of uptake 13" x 19 1/2" Thickness of uptake plates 9/16" Thickness of tube plates front 21/32" back 17/32" Mean pitch of stay tubes in nest 9.45" Pitch in outer vertical rows 8"  
 Diameter of tube holes FRONT stay 2 1/16" plain 2 9/16" BACK stay 2 1/2" plain 2 1/2" Working pressure of tube plates by rules F. 105 lbs B. 112 lbs Tubes: Material Steel  
 External diameter stay 2 1/2" plain 2 1/2" Thickness stay 11/32" plain 10 L.S.G. No. of threads per inch 9 Pitch of tubes 3 5/8" x 4"  
 Working pressure by rules 175 lbs Manhole compensation; Size of opening in shell plate 16" x 12" Section of compensating ring 6" x 5/8" No. of rivets and diameter of rivet holes 36 @ 3/32" Outer row pitch at ends 3 11/16"

HONGKONG & WHAMPOA DOCK Co., Ltd  
 The foregoing is a correct description,  
*Heed*  
 CHIEF MANAGER, Manufacturer.

Dates of Survey while building { During progress of work in shops - } See Glasgow Report No. 60352 Drawing No. 23716  
 { During erection on board vessel - } May 15, 19, 30. June 7, 22, July 5 + 7. 1939  
 Total No. of visits Hongkong 7 Is the approved plan of boiler forwarded herewith No.

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)  
This boiler has been constructed under special survey + the materials + workmanship are good, + has now been installed in the vessel in accordance with the Rules + instructions.  
Boiler was examined under full working conditions + accumulation tests carried out with satisfactory results. Boiler is fitted for burning oil fuel, flash point above 150° F. Steam jet system. Safety Valve washer 9/16" thick.  
It is recommended that the notation "D.B 100 lbs." be made in the Register Book.

Installation Survey Fee ... See Machinery Report : } When applied for 7<sup>th</sup> July 1939  
 Travelling Expenses (if any) £ : } When received 19

Committee's Minute FRI. 1 SEP 1939  
 Assigned see minute on 28. Rph

*J. S. Morrison*  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 Lloyd's Register Foundation  
 W266-0065

The Surveyors are requested not to write on or below the space for Committee's Minutes.