

## REPORT ON BOILERS.

No. 24954

Date of writing Report 6<sup>th</sup> JULY 1953 When handed in at Local Office 10<sup>th</sup> JULY 1953

Port of GREENOCK

No. in Survey held at GREENOCK

Date, First Survey 5/11/52

Last Survey

29/6/1953

Reg. Book

91670 on the MOTORSHIP "BEDFORD"

(Number of Visits)

Gross 12578.32

Tons Net 7306.00

Yard No. 1070

Built at PORT GLASGOW

By whom built LITHGOWS LTD. (KINGSTON YARD.)

SHELL MADE AT LEVEN

HENRY BALFOUR &amp; CO. LTD. J671

Boilers made at GREENOCK

By whom made J.G. KINCAID &amp; CO., LTD. Boiler No. 431 60A

When made 1953

Owners. BLANDFORD SHIPPING CO., LTD.

Port belonging to LONDON.

SPANNER PATENT "SWIRLYFLO" WASTE HEAT

VERTICAL DONKEY BOILER— No. ONE Description EXHAUST GAS Manufacturers of steel COLVILLES LTD.

Made at GREENOCK By whom FINISHED J.G. KINCAID & CO. LTD. When made 1953 Where fixed GREENOCK Working pressure 180  $\frac{\text{lbs}}{\text{sq. in.}}$ tested by hydraulic pressure to 320 Date of test 3/4/53 No. of Certificate 2704 Fire grate area  $\checkmark$  Description of safety valves DOUBLE SPRING.No. of safety valves 1084 Area of each 14.140 Pressure to which they are adjusted 180 If fitted with easing gear YES If steam from main boilers can enter the donkey boiler  $\checkmark$  [INTERNAL Diameter of donkey boiler 7'-4"  $\frac{5}{8}$ " SHELL 9'-6" Material of shell plates STEEL Thickness  $\frac{11}{16}$ "Range of tensile strength 28/32 Tons Description of ~~welding~~ long. seam CLASS I WELDED Diameter of rivet holes  $\checkmark$  Whether punched or drilled  $\checkmark$  Pitch of rivets  $\checkmark$  Lap of plating  $\checkmark$  Per centage of strength of joint  $\checkmark$  Working pressure of shell by rules 196.2  $\frac{\text{lbs}}{\text{sq. in.}}$  Thickness of shell crown plates  $\checkmark$  Radius of do.  $\checkmark$  No. of stays to do.  $\checkmark$  Diameter of stays  $\checkmark$  Diameter of furnace—Top  $\checkmark$  Bottom  $\checkmark$  Length of furnace  $\checkmark$  Thickness of furnace side plates  $\checkmark$  Description of joint  $\checkmark$  Working pressure of furnace by rules  $\checkmark$  Thickness of Ogee ring  $\checkmark$  Working pressure of Ogee ring by rules  $\checkmark$  Thickness of furnace crown plates  $\checkmark$  Radius of do.  $\checkmark$  Stayed by  $\checkmark$  Diameter of uptake  $\checkmark$  Thickness of uptake plates  $\checkmark$  Thickness of tube plates TOP 1" BOTT. 1" Mean pitch of stay tubes in nest 11  $\frac{1}{2}$ " Pitch in outer vertical rows  $\checkmark$ Diameter of tube holes TOP 2  $\frac{5}{8}$ " BOTT. 2  $\frac{1}{4}$ " Working pressure of tube plates by rules AS APPROVED Tubes: Material 20/28 TONS  $\frac{\text{lbs}}{\text{sq. in.}}$ External diameter stay 2" plain Thickness stay 3/8" No. of threads per inch TO TUBE PLATES Pitch of Tubes 2  $\frac{7}{8}$ " TRIANGULAR PITCHWorking pressure by rules AS APPROVED Manhole compensation; Size of opening in shell plate 3 @ 16" x 12" Section of compensating rings 2 x 6" x  $\frac{11}{16}$ " No of rivets and diameter of rivet holes  $\checkmark$  Outer raw pitch at ends  $\checkmark$ 

COMPENSATION PLATES WELDED TO SHELL.

FOR JOHN G. KINCAID &amp; COY. LIMITED.

The foregoing is a correct description.

Chief Draughtsman.

BOILER HEATING SURFACE 2880 SQ. FT.

During progress of work in shops (1952) NOV. 5. 7. 14. 19. DEC. 5. (1953) JAN. 26. 28. FEB. 1. MAR. 2. APRIL 1. 3.

During erection on board vessel - JUNE 29.

Total No. of Visits 12

Is the approved plan of boiler forwarded herewith YES

GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;c.) THE BOILER SHELL WAS FABRICATED BY AN APPROVED MANUFACTURER IN ACCORDANCE WITH THE SOCIETY'S REQUIREMENTS FOR WELDED PRESSURE VESSELS CLASS I, AND THEREAFTER CONSTRUCTED UNDER SPECIAL SURVEY IN ACCORDANCE WITH THE RULES AND APPROVED PLANS. THE MATERIALS AND THE WORKMANSHIP ARE GOOD.

ON COMPLETION OF THE WELDING, THE BOILER WAS STRESS RELIEVED.

IT HAS BEEN EFFICIENTLY INSTALLED ON BOARD THE VESSEL AND THE SAFETY VALVES WERE ADJUSTED UNDER STEAM TO 180  $\frac{\text{lbs}}{\text{sq. in.}}$ .

COMPRESSION RINGS:-

INSBOARD VALVE 27  $\frac{3}{4}$ "OUTBOARD " 7  $\frac{1}{16}$ "

Survey Fee ... £ 21-0-0.

Travelling Expenses (if any) £ :

When applied for 11<sup>th</sup> JULY 1953

When received 19

Committee's Minute

Assigned

GLASGOW 14 JUL 1953

H. K. Taylor.

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

009962-009975-0126