

# REPORT ON BOILERS.

No. 116492.

22 OCT 1959

Received at London Office

Report made on the 28.9. 19 59 When handed in at Local Office 10.10. 19 59. Port of NEWCASTLE-ON-TYNE.Survey held at "NORTH SHIELDS" Date, First Survey 6/8/59 Last Survey 7.9. 19 59.on the m.v. "PULBOROUGH" ex "GERTRUDE WIENER" (Number of Visits 9)  
Tons { Gross 942  
Net 459Built at Bremen By whom built Rolandwerft G.m.b.H. Yard No. \_\_\_\_\_ When built 1956Made at Kiel By whom made Maschinenbau Kiel Aktiengesellschaft Engine No. 15757 When made 1956Made at Hamburg By whom made Ottensener Eisenwerk Boiler No. 5861 When made 1956Surveyed by Stephenson Clarke Ltd. Port belonging to London

## MAIN BOILER.

Made at Hamburg By whom made Ottensener Eisenwerk Boiler No. 5861 When made 1956 Where fixed Forward end of E.R.Manufacturers of Steel Phoenix-Rheinrohr A.G. Dusseldorf. Werk-Mulheim-RuhrHeating Surface of Boiler 648 sq.ft. Is forced draught fitted Yes ~~Coal~~ Oil fired OilDescription of Boilers One vertical multitubular Working Pressure 127 lb./sq. in.Hydraulic pressure to 180 lb./sq. in. Date of test 2.9.59. No. of Certificate -Fire grate in each Boiler - No. and description of safety valves to each boiler 2 - 2" bore ordinary liftEach set of valves per boiler { per Rule 5.75 sq. ins  
as fitted 6.3 sq. ins. Pressure to which they are adjusted 127 lb./sq. in. Are they fitted with easing gear YesWhether steam from main boilers can enter the donkey boiler - Smallest distance between boiler or uptake and bunkers 2' 0"Is oil fuel carried in the double bottom under boiler Yes Smallest distance between base of boiler and tank top plating 6' 6"Is the base of the boiler insulated Brickwork Largest internal dia. of boiler 5' 6" Height 10' 0"Material S.M. Boiler Plate H11 Tensile strength 27.8 tons/sq. in. Thickness .51"Shell plates welded Welded If fusion welded, state name of welding firm Ottensener EisenwerkDo the requirements of the Rules for Class I vessels been complied with \_\_\_\_\_ Description of riveting: circ. seams { end \_\_\_\_\_  
inter \_\_\_\_\_Dia. of rivet holes in { circ. seams \_\_\_\_\_ Pitch of rivets { \_\_\_\_\_ Percentage of strength of circ. seams { plate \_\_\_\_\_  
long. seams \_\_\_\_\_ rivets \_\_\_\_\_Shell Crown: Whether complete hemisphere, dished partial or flat Dished Material S.M. Boiler plate Tensile strength 28.8 Tons/sq. in. Thickness .51"Description of Furnace: Dished Material S.M. Boiler PlateTensile strength 28.7 tons/sq. in. Thickness .71" External diameter { 5' 5" 4.5 Length as per Rule -

Support stays circumferentially \_\_\_\_\_ and vertically \_\_\_\_\_ Are stays fitted with nuts or riveted over \_\_\_\_\_

Radius of spherical or dished furnace crown 4' 4 1/2"Diameter as per Rule { D \_\_\_\_\_  
d \_\_\_\_\_Material S.M. Boiler Plate Tensile strength 28.5 tons/sq. in. Thickness of top plate .71"Thickness of back plate .52" Diameter if circular 53"Pitch of stays 10.8" vertically 11.8" radiallyDiameter of stays 1.26"Material { front S.M. Boiler Plate Tensile strength 28.2 tons/sq. in. Thickness .87" Mean pitch of stay tubes in nests Vert. 5.6"  
back S.M. Boiler Plate Tensile strength 28.2 tons sq. in. Thickness .87" Horiz. 5.85"Pitch in outer vertical rows { front 5.6" Dia. of tube holes FRONT { stay 2.09" plain 2.01"  
back \_\_\_\_\_ BACK { stay 2.01" plain 2.01"

Do the requirements of the Rules for Class I vessels been complied with \_\_\_\_\_

Material S.M. Boiler Plate Tensile strength 30.5 tons/sq. in.Thickness of girder at centre 6.3" 1" thk. Length as per Rule Cent 20.9"  
Side 17"No. and pitch of stays in each No stays (welded)

012148-012158-0063

Crown Stays: Material - Tensile strength - Diameter { at body of stay, - or over threads. -  
 No. of threads per inch - Screw Stays: Material - Tensile strength 26.2 tons per  
 Diameter { at turned off part, 1.26" No. of threads per inch - Are the stays drilled at the outer ends No  
 Tubes: Material S.M. Boiler tubes External diameter { plain 2.01" Thickness .118" or stay 2.01" .197"  
 No. of threads per inch - Pitch of tubes Horiz. 2.92" x 2.8" vertical  
 Manhole Compensation: Size of opening in shell plate 16 3/4 x 21 1/4 Section of compensating ring See drawing No. of rivets and diam  
 of rivet holes welded Outer row rivet pitch at ends - Depth of flange if manhole flanged -  
 Uptake: External diameter - Thickness of uptake plate -  
 Cross Tubes: No. - External diameters { - Thickness of plates -

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

The foregoing is a correct description,

Manufacture

Dates of Survey while building { During progress of work in shops - - - Is the approved plan of boiler forwarded herewith (If not state date of approval.)  
 { During examination on board vessel - - - Aug. 6, 7, 10, 11, 17, 27, 31 Total No. of visits 9  
 Sept. 2

Is this Boiler a duplicate of a previous case. No If so, state Vessel's name and Report No. -

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

The boiler was originally built to Germanischer Lloyd Survey.

The boiler has been examined throughout including mountings, fastenings and seatings and found or placed in accordance with the Rules, approved plans and Secretary's letters. The materials and workmanship, so far as could be seen, are good. The boiler was hydraulically tested to 180 lb./sq in. examined under steam, tested for accumulation of pressure and the safety valves adjusted at 125 lb./sq.in.

Scantlings are as per approved plan giving due allowance for wear and tear.

As requested in the Secretary's letter of the 24th August, 1959, particular attention was given in examining the boiler to the cross stays and their internal welds and to the furnace crown and these were found satisfactory.

See Report 9 for repairs.

Survey Fee ... £ 10 : 0 : 0 When applied for 21 OCT 1959  
 Travelling Expenses (if any) £ : : When received 19

Date FRIDAY - 4 DEC 1959

H. Pollock R.P. Frazer  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 H. POLLOCK. © R.P. FRAZER.

Committee's Minute See Rpt. 1

