

REPORT ON WATER TUBE BOILERS

SUNDERLAND RPT. NO. 35873

No. 19302

DEC 1951

Received at London Office

Date of writing Report **6-12-1951** When handed in at Local Office **6-12-1951** Port of **West Hartlepool**
 No. in Survey held at **West Hartlepool** Date, First Survey **15th January**, Last Survey **5th December, 1951.**
 Reg. Bk. on the **CALTEX DELHI.** (Number of Visits **19**) Tons { Gross **857**
 Net **4808**
 built at **Sunderland** By whom built **Wm Donford & Sons Ltd** When built **1951**
 Engines made at **-do-** By whom made **-do-** When made **1951**
 Boilers made at **West Hartlepool** By whom made **Richardson Westgarth & Co Ltd** When made **1951**
 Nominal Horse Power **M.N. 288 each** Owners **Oversea Tankship (UK) Ltd** Port belonging to **London.**

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

Date of Approval of plan **30-6-49** DESIGN PRESS **250 lbs.** Number and Description or Type
 of Boilers **2-Foster Wheeler Water Tube Boilers** Working Pressure **220 lbs** Tested by Hydraulic Pressure to **425 lbs** Date of Test **26-11-51**
 No. of Certificate **4154** Can each boiler be worked separately **Yes** Total Heating Surface of Boilers **6920 sq ft** Including
 forced draught fitted **Yes** Area of fire grate (coal) in each Boiler **100 sq ft** **3460 sq ft each boiler**
 No. and type of burners (oil) in each boiler **2-Jodds** No. and description of safety valves on
 each boiler **One 2" Single Spring Rockham High Lift** Area of each set of valves per boiler { per rule
 as fitted **3.140"** Pressure to which they
 are adjusted **220 lbs Suph** Are they fitted with easing gear **Yes** In case of donkey boilers state whether steam from main boilers can enter
 the donkey boiler **250 lbs Sub. Air** Smallest distance between boilers or uptakes and bunkers or woodwork **✓** Height of boiler **16'-8 9/16"**
 Width and Length **10'-4 1/16" x 11'-6 3/4"** Steam Drums:—Number in each boiler **One** Inside diameter **3'-5 3/4"**
 Thickness of plates **1 5/16"** Range of Tensile Strength **28-32 Tons** Are drum shell plates welded
 or flanged **Welded** If fusion welded, state name of welding firm **Marshall & Anderson Ltd Motherwell** Have all the requirements of the rules
 for Class I vessels been complied with **Yes** Description of riveting:—Cir. seams **✓** long. seams **✓**
 Diameter of rivet holes in long. seams **✓** Pitch of rivets **✓** Thickness of straps **✓** Percentage strength of
 long. joint:—Plate **✓** Rivet **3 3/4" = 33 1/3%** Diameter of tube holes in drum **2" 1/8"** Pitch of tube holes **3" 4 1/4"**
 Percentage strength of shell in way of tubes **1 3/4" = 35.7%** Steam Drum Heads or Ends:—Range of tensile strength **26-30 Tons**
 Thickness of plates **1 5/16"** Radius or how stayed **3'-5 3/4" inside** Size of manhole or handhole **16" x 12"** Water Drums:—Number
 in each boiler **One** Inside Diameter **2'-5 1/2"** Thickness of plates **1 1/8"** Range of tensile strength **28-32 Tons** Are drum shell plates
 welded or flanged **Welded** If fusion welded, state name of welding firm **Marshall & Anderson Ltd Motherwell** Have all the requirements of the rules
 for Class I vessels been complied with **Yes** Description of riveting:—Cir. seams **✓** long. seam **✓**
 Diameter of rivet holes in long. seams **✓** Pitch of rivets **✓** Thickness of straps **✓**
 Percentage strength of long. joint:—Plate **✓** Rivet **3 3/4" = 33 1/3%** Diameter of tube holes in drum **2" 1/8"** Pitch of tube holes **3" 4 1/4"**
 Percentage strength of drum shell in way of tubes **1 3/4" = 35.7%** Water Drum Heads or Ends:—Range of Tensile strength **26-30 Tons**
 Thickness of plates **1 1/8"** Radius or how stayed **2'-5 1/2" inside** Size of manhole or handhole **16" x 12"**
 Headers or Sections:—Number **✓** Material **✓** Thickness **✓** Tested by Hydraulic Pressure to **✓**
 Tubes:—Diameter **2" 1/8"** Thickness **8-11-12 g.** Number **155 per boiler** Steam Dome or Collector:—Description of
 Joint to Shell **✓** Inside diameter **✓** Thickness of shell plates **✓** Range of tensile
 strength **✓** Description of longitudinal joint **✓** If fusion welded, state name of welding
 firm **✓** Have all the requirements of the rules for Class I vessels been complied with **✓** Diameter of rivet holes **✓**
 Pitch of rivets **✓** Thickness of straps **✓** Percentage strength of long. joint **✓** Plate **✓** Rivet **✓**
 Crown or End Plates:—Range of tensile strength **✓** Thickness **✓** Radius or how stayed **✓**
 SUPERHEATER. Drums or Headers:—Number in each boiler **One** Inside Diameter **5 1/4" x 4 1/2" inside**
 Thickness **3/4"** Material **Mild Steel** Range of tensile strength **28-32 Tons** Are drum shell plates welded
 or flanged **Welded** If fusion welded, state name of welding firm **Foster Wheeler Ltd** Have all the requirements of the rules
 for Class I vessels been complied with **Yes** Description of riveting:—Cir. seams **✓** long. seams **✓**
 Diameter of rivet holes in long. seams **✓** Pitch of rivets **✓** Thickness of straps **✓** Percentage strength of
 long. joint:—Plate **✓** Rivet **✓** Diameter of tube holes in drum **2" 7/8"** Pitch of tube holes **3 1/4"** Percentage strength of
 drum shell in way of tubes **38.4%** Drum Heads or Ends:—Two Thickness **1 3/8"** Range of tensile strength **28-32 Tons**
 Radius or how stayed **✓** Size of manhole or handhole **2'-0 3/8" x 2'-0 3/8"** Number, diameter, and thickness of tubes **12 x 2" 1/4" x 7 g thick**
 Tested by Hydraulic Pressure to **425 lbs** Date of Test **15-11-51** Is a safety valve fitted to each section of the superheater which
 can be shut off from the boiler **✓** No. and description of Safety Valves **One 2" Double Spring Rockham High Lift** Area of each set
 of valves **6.30"** Pressure to which they are adjusted **✓** Is easing gear fitted **Yes**

Spare Gear. Has the spare gear required by the rules been supplied

RICHARDSONS, WESTGARTH & Co. LIMITED
 The foregoing is a correct description,

J. P. Hunt Manufacturer.
DIRECTOR

Dates of Survey { During progress of **1951. Jan. 15. Feb. 13. 16. March 19. April 12.** Is the approved plan of boiler forwarded herewith **Retained**
 while building { work in shops - **May 10. June 5. Aug. 31. Sept. 24. Oct. 1. 8. 10. 22.** for use of Duplicate contract
 { During erection on **Nov. 6. 9. 15. 16. 26. Dec. 5.** Total No. of visits **19.**
 { board vessel - - -

Is this boiler a duplicate of a previous case **Yes** If so, state vessel's name and report No.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **These Boilers have been constructed under special survey in accordance with approved plans, Secretary's letter and the rules of the Society for a working pressure of 220 lb. The materials and workmanship are good. On completion they were tested by hydraulic pressure to 425 lbs and found sound and tight.**

Survey Fee ... £ **53.16.0** When applied for, **6-12-1951.**
 Travelling Expenses (if any) £ **82.14.0** When received, **19**

See Hpl Ltr 10/12

H. A. Wilson **W. Armstrong**
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI. 26 SEP 1952**
 Assigned **See F.E. mch. 7th Sld 35873**

004662-004667-0014

Lloyd's Register
 Foundation