

## REPORT ON WATER TUBE BOILERS.

No. 105215

APR 1948

Received at London Office

Date of writing Report 19... When handed in at Local Office 21/4/48 19... Port of NEWCASTLE ON TYNE  
 No. in Survey held at North Shields Date, First Survey 18.2.48 Last Survey 12.4.1948  
 Reg. Book. 36863 on the Turbo-elect. ss. "THELICONUS"  
 Built at Mobile By whom built Alabama D.D. & S.B. Corp. Yard No. 2048. When built 1945.  
 Engines made at Schenectady N.Y. By whom made General Electric Co. Engine No. 62869 When made 1945.  
 Boilers made at New York By whom made Combustion Eng. Co. Inc. Boiler Nos. 9487 } When made 1945.  
 Nominal Horse Power 1,485 Owners Anglo American Petroleum Co. Ltd. Port belonging to LONDON.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel. North Steel Co. Tenn. Coal & Iron & R.R. Bolt Steel Co.

Date of Approval of plan... No. and Description or Type  
 of Boilers 2, S.M. Type. Working Pressure 500 lb./sq. in. Tested by Hydraulic Pressure to 750 lb./sq. in. Date of Test 1.10.45  
 No. of Certificate... Can each boiler be worked separately... Total Heating Surface of Boilers 11,354 sq. ft. (Boilers 9,868 sq. ft., Sple. 1,486 sq. ft.)  
 Is forced draught fitted... Area of Fire Grate (coal) in each Boiler...  
 No. and type of burners (oil) in each boiler 7, Todd Hux. Burn. No. and description of safety valves on each boiler 2-2 1/2 duplex consolidates type Area of each set of valves per boiler 4.9 sq. ft. (2 ft. 1.77 sq. ft.) Pressure to which they are adjusted 500 lb./sq. in. Are they fitted with easing gear... In case of donkey boilers state whether steam from main boilers can enter the donkey boiler... Height of boiler 21'-0"  
 Width and length 11'-10" x 15'-6" Steam Drums:—Number in each boiler one Inside diameter 42"  
 Thickness of plates 1 3/8" + 3/4" Range of tensile strength 65,000/70,000 lb. Are drum shell plates welded or flanged welded If fusion welded, state name of welding firm... Have all the requirements of the Rules for Class I vessels been complied with... Description of riveting:—Circ. 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 4.32" Pitch of tube holes 7"  
 Percentage strength of shell in way of tubes 42 Steam Drum Heads or Ends:—Range of tensile strength... Size of manhole or handhole 12" x 16"  
 Thickness of plates 1 1/4" Radius or how stayed Ellipsoidal Inside diameter... Thickness of plates... Range of tensile strength... Are drum shell plates welded or flanged... If fusion welded, state name of welding firm... Have all the requirements of the Rules for Class I vessels been complied with... Description of riveting:—Circ. 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... Pitch of tube holes...  
 Percentage strength of drum shell in way of tubes... Water Drum Heads or Ends:—Range of tensile strength... Size of manhole or handhole...  
 Thickness of plates... Radius or how stayed... Tested by hydraulic pressure to 750 lb./sq. in.  
 Headers or Sections:—Number 1/4 Material Steel Thickness 9/16" 3/4" Number 1148, 56 & 48. MUD-DRUM Steam Dome or Collector:—Description of joint to shell headers Ripped Inside diameter 7 1/2" x 7 1/2" Thickness of shell plates 1 3/8" Range of tensile strength... If fusion welded, state name of welding firm...  
 firm... Have all the requirements for 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... Inside diameter 5 3/4" square 9 1/4"  
 SUPERHEATER, Drums or Headers:—Number in each boiler Two, interdeck Material Steel Range of tensile strength 65,000/70,000 lb. Are plates welded or flanged welded If fusion welded, state name of welding firm... Have all the requirements of the Rules for Class I vessels been complied with... Description of riveting:—Circ. 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... Pitch of tube holes...  
 drum shell in way of tubes... Drum Heads or Ends:—Thickness... Range of tensile strength...  
 Radius or how stayed... Size of manhole or handhole... Number, diameter, and thickness of tubes 146, 1 1/2", 11 B.W.C.  
 Tested by hydraulic pressure to... Date of test... 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 12" consolidates type Area of each set of valves 1.77 sq. ft. Pressure to which they are adjusted 473 lb./sq. in. Is easing gear fitted...  
 Spare Gear. Has the spare gear required by the Rules been supplied... The foregoing is a correct description,

Manufacturer.

Dates of Survey } During progress of work in shops - - -  
 while building } During erection on board vessel - - -

Is the approved plan of boiler forwarded herewith

Total No. of visits

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These W.T. boilers have been constructed under the supervision of the U.S. Coast Guard and the American Bureau of Shipping. The materials used have been verified as far as practicable. The workmanship is good and the materials considered sound.

Survey Fee ... \$ ... When applied for 19...  
 Travelling Expenses (if any) \$ ... When received 19...

Date

FRI. 28 MAY 1948

Committee's Minute

See F.E. Welch. spk.

W. L. Allan  
 Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register

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