

## REPORT ON WATER TUBE BOILERS.

No. 105281

Received at London Office 22 MAY 1948

Date of writing Report 19 When handed in at Local Office 11 MAY 1948 Port of Newcastle-on-Tyne  
 No. in Survey held at Blyth Date, First Survey 25th March 48 Last Survey 13th April 1948  
 Reg. Bk. 35711 on the steel sc. steamer "WATSON FERRIS" (Number of Visits 10) Tons Gross 1791 Net 1041  
 Built at Superior, Wisconsin U.S.A. By whom built Walter Butler Shipbuilders Inc. When built 1943  
 Engines made at Menominee, Mich. By whom made Prescott Company When made 1943  
 Boilers made at Saginaw, U.S.A. By whom made Wickes Boiler Co When made 1943  
 Nominal Horse Power 330 Owners Ministry of Transport Port belonging to London

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

Date of Approval of plan \_\_\_\_\_ Number and Description or Type of Boilers Two, Water tube, 3 drum, (Wickes) Working Pressure 250 lbs/sq. in. Tested by Hydraulic Pressure to \_\_\_\_\_ Date of Test \_\_\_\_\_  
 No. of Certificate \_\_\_\_\_ Can each boiler be worked separately yes Total Heating Surface of Boilers 4800 sq. ft.  
 Is forced draught fitted yes - Induced Area of fire grate (coal) in each Boiler 56 sq. ft.  
 No. and type of burners (oil) in each boiler \_\_\_\_\_ No. and description of safety valves on each boiler Spring loaded, 2 on drum, 1 on superheater Area of each set of valve 5.52 sq. in. + 1.23 sq. in. Pressure to which they are adjusted 245 lbs/sq. in. Superheater 225 lbs/sq. in.  
 Are they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler \_\_\_\_\_  
 Smallest distance between boilers or uptakes and bunkers or woodwork app. 10" Height of boiler \_\_\_\_\_ Width and Length \_\_\_\_\_  
 Steam Drums:—Number in each boiler one Inside diameter 3'-9 1/2" Thickness of plates 15/16"  
 Range of Tensile Strength \_\_\_\_\_ Are drum shell plates welded or flanged welded Description of riveting:—  
 Cir. seams \_\_\_\_\_ long. seams \_\_\_\_\_ Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_  
 Lap of plate or width of butt straps \_\_\_\_\_ Thickness of straps \_\_\_\_\_ Percentage strength of long. joint:—Plate \_\_\_\_\_ Rivet \_\_\_\_\_  
 Diameter of tube holes in drum 2 1/2" x 1 1/2" Pitch of tube holes 4 1/2" x 2 1/2" Percentage strength of shell in way of tubes 40%  
 Working pressure by rules \_\_\_\_\_ Steam Drum Heads or Ends:—Range of tensile strength \_\_\_\_\_ Thickness of plates 1 1/2"  
 Radius or how stayed Radius 46" Size of manhole or handhole 16" x 12" Working pressure by rules \_\_\_\_\_ Water Drums:—Number in each boiler two Inside Diameter 2'-3" Thickness of plates 9/16" Range of tensile strength \_\_\_\_\_ Are drum shell plates welded or flanged welded Description of riveting:—Cir. seams \_\_\_\_\_ long. seam \_\_\_\_\_ Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plates or width of butt straps \_\_\_\_\_ Thickness of straps \_\_\_\_\_  
 Percentage strength of long. joint:—Plate \_\_\_\_\_ Rivet \_\_\_\_\_ Diameter of tube holes in drum 2 1/2" x 1 1/2" Pitch of tube holes 4 1/2" x 2 1/2"  
 Percentage strength of drum shell in way of tubes 40% Working pressure by rules \_\_\_\_\_ Water Drum Heads or Ends:—Range of Tensile strength \_\_\_\_\_ Thickness of plates 1 1/2" Radius or how stayed 27" Rad.  
 Size of manhole or handhole 16" x 12" Working pressure by rules \_\_\_\_\_ Headers or Sections:—Number \_\_\_\_\_ Tubes:—Diameter 2 1/2 x 1 1/2" O.D.  
 Material \_\_\_\_\_ Thickness \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_ Steam Dome or Collector:—Description of Joint to Shell \_\_\_\_\_  
 Thickness 2 1/2" = .120", 1 1/2" = .095 Number \_\_\_\_\_ Range of tensile strength \_\_\_\_\_  
 Inside diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Diameter of rivet holes \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plate or width of butt straps \_\_\_\_\_  
 Description of longitudinal joint \_\_\_\_\_ Percentage strength of long. joint:—Plate \_\_\_\_\_ Rivet \_\_\_\_\_ Thickness of straps \_\_\_\_\_  
 Working Pressure of shell by rules \_\_\_\_\_ Crown or End Plates:—Range of tensile strength \_\_\_\_\_ Working pressure by rules \_\_\_\_\_  
 Thickness \_\_\_\_\_ Radius or how stayed \_\_\_\_\_ Inside Diameter 6 1/2"  
**SUPERHEATER. Drums or Headers:—**Number in each boiler 2 Inside Diameter 6 1/2"  
 Thickness 3/4" Material \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are drum shell plates welded or flanged \_\_\_\_\_  
 Description of riveting:—Cir. seams \_\_\_\_\_ long. seams \_\_\_\_\_ Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plates or width of butt straps \_\_\_\_\_ Thickness of straps \_\_\_\_\_  
 Percentage strength of long. joint:—Plate \_\_\_\_\_ Rivet \_\_\_\_\_ Diameter of tube holes in drum 1 1/2" Pitch of tube holes \_\_\_\_\_  
 Percentage strength of drum shell in way of tubes \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ Drum Heads or Ends:—  
 Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Radius or how stayed \_\_\_\_\_ Size of manhole or handhole Plug  
 Working pressure by rules \_\_\_\_\_ Number, diameter, and thickness of tubes 1 1/2" x .15 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 see above. (Superheater can not be shut off) Area of each set of valves \_\_\_\_\_  
 Pressure to which they are adjusted \_\_\_\_\_ Is easing gear fitted \_\_\_\_\_  
 Spare Gear. Has the spare gear required by the rules been supplied yes

The foregoing is a correct description,

Manufacturer.

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

Is the approved plan of boiler forwarded herewith

Total No. of visits 10

Is this boiler a duplicate of a previous case yes. If so, state vessel's name and report No. Teuma Hatch. No. 105222.

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

CommitteeFor the information of thePlease inform the fee

Survey Fee ... £ : : When applied for, 19  
 Travelling Expenses (if any) £ : : When received, 19

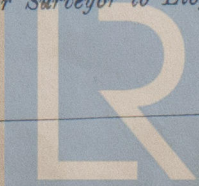
Committee's Minute

Assigned

See F.E. Melby. rpt.

FRI. 4 JUN 1948

J. Bowman.  
 Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register  
 W1039-0070  
 Foundation