

# REPORT ON WATER TUBE BOILERS.

No. 40295

AUG 19 1940

of writing Report July 10<sup>th</sup> 1940 When handed in at Local Office July 15, 40 Received at London Office \_\_\_\_\_  
 Port of New York  
 Survey held at New Jersey & Brooklyn, New York Date, First Survey April 12<sup>th</sup> Last Survey June 27<sup>th</sup> 1940  
 on the S/S VALIENTE EX. OBRIEN BROTHERS. (Number of Visits 12) Tons { Gross 5967  
 Net 3741  
 at Portsmouth, New Hampshire By whom built Atlantic Corporation When built 1920  
 Lines made at Portsmouth, N.H. By whom made Atlantic Corporation When made 1920  
 Boilers made at Oil City, Pennsylvania By whom made Atlantic Corporation When made 1920  
 Indicated Horse Power 603 Owners Compania Diana De Vapores S.A. Port belonging to Panama.

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

Date of Approval of plan 9<sup>th</sup> July 1940. Number and Description or Type  
 Boilers 3 Foster type water tub Working Pressure 215 Tested by Hydraulic Pressure to ✓ Date of Test ✓  
 of Certificate ✓ Can each boiler be worked separately yes Total Heating Surface of Boilers 9150  
 forced draught fitted yes (induction fan) Area of fire grate (coal) in each Boiler Oil fired  
 and type of burners (oil) in each boiler 4 Todd Hexpress No. and description of safety valves on  
 boiler 2 3" dia spring loaded on 2 boilers Area of each set of valve 14.14" & 19.2" Pressure to which they are adjusted 215 lbs  
 they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler none  
 least distance between boilers or uptakes and bunkers or woodwork 7'-8" Height of boiler 15'-4" Width and Length 12'-6" x 14'  
 in Drums:—Number in each boiler one Inside diameter 42" Thickness of plates .75"  
 of Tensile Strength 55,000 lbs. Are drum shell plates welded or flanged NO Description of riveting:—  
 seams single long. seams table DBS Diameter of rivet holes in long. seams 15/16" Pitch of rivets 3 7/8" & 7 3/4"  
 of plates or width of butt straps 19 3/8" & 13 3/8" Thickness of straps 9/16" Percentage strength of long. joint:—Plate 87.8 Rivet 77.3  
 diameter of tube holes in drum 3 1/2" Pitch of tube holes 7 3/4" Percentage strength of shell in way of tubes 60.7  
 working pressure by rules 360 lb Steam Drum Heads or Ends:—Range of tensile strength 55,000 lbs Thickness of plates .75"  
 radius or how stayed 42" Size of manhole or handhole 15" x 11" Working pressure by rules 215 lbs Water Drums:—Number  
 in each boiler NONE Inside Diameter ✓ Thickness of plates ✓ Range of tensile strength ✓ Are drum shell plates  
 welded or flanged ✓ Description of riveting:—Cir. seams ✓ long. seam ✓ Diameter of rivet holes in  
 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 ✓ Pitch of tube holes ✓  
 percentage strength of drum shell in way of tubes ✓ Working pressure by rules ✓ Water Drum Heads or Ends:—Range of  
 tensile strength NONE Thickness of plates ✓ Radius or how stayed ✓  
 size of manhole or handhole ✓ Working pressure by rules ✓ Headers or Sections:—Number 2 each boiler  
 material steel Thickness .75" Tested by Hydraulic Pressure to 267 lbs. Tubes:—Diameter 3"  
 thickness #10 gauge .130" Number 444 each boiler Steam Dome or Collector:—Description of Joint to Shell NONE  
 diameter ✓ Thickness of shell plates ✓ Range of tensile strength ✓  
 description of longitudinal joint ✓ Diameter of rivet holes ✓ Pitch of rivets ✓ Lap of plate or width of  
 straps ✓ Thickness of straps ✓ Percentage strength of long. joint ✓ Plate ✓ Rivet ✓  
 working pressure of shell by rules ✓ Crown or End Plates:—Range of tensile strength ✓  
 thickness ✓ Radius or how stayed ✓ Working pressure by rules ✓

PERHEATER. Drums or Headers:—Number in each boiler NONE. (ALL REMOVED) Inside Diameter ✓  
 thickness ✓ Material ✓ Range of tensile strength ✓ Are drum shell plates welded  
 angled ✓ Description of riveting:—Cir. seams ✓ long. seams ✓ Diameter of rivet holes in  
 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 ✓ 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 ✓  
 working pressure by rules ✓ Number, diameter, and thickness of tubes ✓ 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 ✓  
 kind and description of Safety Valves ✓ Area of each set of valves ✓  
 pressure to which they are adjusted ✓ Is easing gear fitted ✓

Easing Gear. Has the spare gear required by the rules been supplied yes  
 The foregoing is a correct description, ✓ Manufacturer. \_\_\_\_\_

Is the approved plan of boiler forwarded herewith yes  
 Total No. of visits 12

Is 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 boilers were built in 1920 but not under special survey. They are however of a standard type (Foster) which was approved at that time. The steel was tested by U.S. Steamboat Inspectors as per their certificate. They were tested in presence of the undersigned to 267 lbs by hydraulic pressure & found good, afterwards examined internally & found good. They are now in good & safe working condition & eligible in my opinion to be classed & to receive a notation 215 lbs in the Register Book, subject to being annually surveyed.

Survey Fee £150 When applied for 19  
 Travelling Expenses (if any) £ When received 31. 7. 49

Committee's Minute NEW YORK JUL 24 1940 Job  
 Signed J.W.T.B. 215 lbs

James A. Young & J.M. Belmont  
 Engineer Surveyors to Lloyd's Register of Shipping.

