

# REPORT ON WATER TUBE BOILERS.

No. 16550

3474

Rpt. 5c.

Date of writing Report Oct 11 1919 When handed in at Local Office Oct 11 1919 Port of New York

No. in Survey held at Bayonne N.J. Date, First Survey Nov. 21 1918 Last Survey Sept 30 1919

Reg. Bk. on the S/S Abraham Lincoln Number of Visits 46 Tons Gross 8289 Net 6176

Master W. A. Ryan Built at Glanville N.J. By whom built Pulley & Jones Co. Ltd. (Ca) When built 1919

Engines made at Schenectady N.Y. By whom made General Electric Company When made 1918

Boilers made at Bayonne N.J. By whom made Babcock & Wilcox Co When made 1919

Registered Horse Power \_\_\_\_\_ Owners Emergency Fleet Corporation Port belonging to Glanville City

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY—Manufacturers of Steel Cuba Iron & Steel Works

Letter for Record S. Date of Approval of plan July 12 1917 Number and Description or Type of Boilers 3 Water tube Working Pressure 205 lbs Tested by Hydraulic Pressure to 400 Date of Test \_\_\_\_\_

No. of Certificate 368 Can each boiler be worked separately Yes Total Heating Surface of Boilers 8766 sq ft

Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 87.5 sq ft Total grate area of boilers in vessel including Main and Auxiliary 525 sq ft No. and type of burners (oil) in each boiler Five No. and description of safety valves on each boiler double spring loaded Area of each valve 7.06 sq in Pressure to which they are adjusted 210 lbs

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 24" Height of Boiler 12'-10" Width and Length 4'-7 1/2" x 11'-7 1/8"

Steam Drums:—Number in each boiler 6 Inside diameter 42" Material of plates Steel Thickness 1/2"

Range of Tensile Strength 55/65000 lbs Are drum shell plates welded or flanged No Description of riveting:—

Cir. seams P.R. LAP. long. seams D.R.D. B.S. Diameter of rivet holes in long. seams 29/32 Pitch of Rivets 2 29/32 x 4 9/16

width of butt straps 9 3/4 x 9 1/2 Thickness of straps 9/16 Percentage strength of long. joint:—Plate 80/1 Rivet 108

Diameter of tube holes in drum 4 1/2 Pitch of tube holes 7" Percentage strength of shell in way of tubes 84/P

If Drum has a flat side state method of staying Yes Depth and thickness of girders at centre (if fitted) \_\_\_\_\_ Distance apart Yes Number and pitch of stays in each Yes Working pressure by rules 243 lbs

Size of Manhole 15" x 11" Water Drums:—Number in each boiler Yes Inside Diameter 42"

Material of plates Yes Thickness Yes Range of tensile strength Yes Are drum shell plates welded or flanged Yes Description of riveting:—Cir. seams Yes long. seams Yes Diameter of Rivet Holes in long. seams Yes Pitch of rivets Yes Lap of plates or width of butt straps Yes Thickness of straps Yes

Percentage strength of long. joint:—Plate Yes Rivet Yes Diameter of tube holes in drum Yes Pitch of tube holes Yes

Percentage strength of drum shell in way of tubes Yes Water Drum Heads or Ends:—Material Yes Thickness Yes

Radius or how stayed Yes Size of manhole or handhole Yes Headers or Sections:—Number 24

Material Steel Thickness 9/16 Tested by Hydraulic Pressure to 500 lbs Material of Stays Yes

Area at smallest part Yes Area supported by each stay Yes Working Pressure by Rules 289 lbs Tubes:—Diameter 4"

Thickness 1/8 B.W.G. Number 240 Steam Dome or Collector:—Description of Joint to Shell Yes

Percentage strength of Joint Yes Diameter Yes Thickness of shell plates Yes Material Yes

Description of longitudinal joint Yes Diameter of Rivet Holes Yes Pitch of Rivets Yes Working Pressure of shell by Rules Yes

Crown or End Plates:—Material Yes Thickness Yes How stayed Yes

SUPERHEATER. Type \_\_\_\_\_ Date of Approval of Plan \_\_\_\_\_ 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 \_\_\_\_\_

Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is easing gear fitted \_\_\_\_\_

Is a drain cock or valve fitted at lowest point of superheater \_\_\_\_\_ Number, diameter, and thickness of tubes \_\_\_\_\_

Spare Gear. Tubes \_\_\_\_\_ Gaskets or joints:—Manhole \_\_\_\_\_ Handhole \_\_\_\_\_ Handhole plates \_\_\_\_\_

The foregoing is a correct description, The Babcock & Wilcox Co. Manufacturer. per W. H. Stubbard Marine Dept.

Dates of Survey: During progress of work in shops 1919 Feb. 16, 17, 18, 19 daily until 23 April 19 Is the approved plan of boiler forwarded herewith \_\_\_\_\_

while building: During erection on board vessel \_\_\_\_\_ Total No. of visits \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Workmanship and material are both of good quality: To complete the Survey, boilers to be re-erected on board & tested by hydraulic pressure. All mounting to be examined & fitted. Safety valves to be adjusted under steam. Boilers now erected on board mountings examined and fitted. Hydrostatic test of 410 lbs applied and safety valves adjusted to 210 lbs

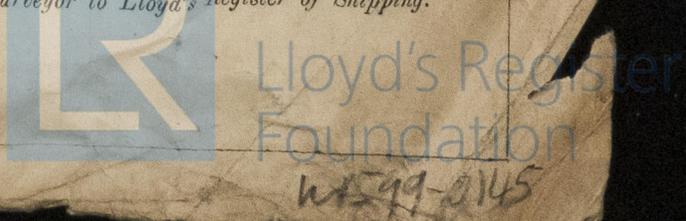
Survey Fee ... £ : : When applied for, 191

Travelling Expenses (if any) £ : : When received, 191

Committee's Minute New York OCT 21 1919

Assigned See Phil Rpt 3474

(Signed) A. Mac Watt. A. Adams Engineer Surveyor to Lloyd's Register of Shipping.



W 99-2145