

REPORT ON BOILERS.

No. 430

1 DEC 1928

Received at London Office

Date of writing Report Sept 25 1928 When handed in at Local Office 191 Port of Cleveland Ohio
 No. in Survey held at Lorain Ohio Date, First Survey Feb. 23. Last Survey Oct 11. 19128.
 Reg. Book. 1055 on the Motor Tanker "MARTHA E. ALLEN" (Number of Visits 24) Gross 2935 Tons Net 1994
 Master Built at Lorain By whom built Ames S. B. Boy When built 1928-9
 Engines made at Amsterdam By whom made Werkspoor When made 1924-1928
 Boilers made at Lorain By whom made Ames S. B. Boy When made 1928
 Registered Horse Power 400 Owners Lake Tankers Corp. Port belonging to Whiting, Ind.

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY~~ DONKEY. -Manufacturers of Steel Carnegie & Lukens

(Letter for record (r)) Total Heating Surface of Boilers 916.86 Is forced draft fitted no No. and Description of Boilers one, Scotch marine single ended Working Pressure 150 Tested by hydraulic pressure to 225 Date of test 15 May 28

No. of Certificate 225 Can each boiler be worked separately Area of fire grate in each boiler oil fired No. and Description of safety valves to each boiler two duplex Area of each valve 4.908 Pressure to which they are adjusted 150

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 Mean dia. of boilers 10'-0" Length 11'-0"

Material of shell plates S. Thickness 2 7/32 Range of tensile strength 28-35 Are the shell plates welded or flanged no
 Descrip. of riveting: cir. seams L.S.R. long. seams B.S.R. Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 4.58

Top of plates or width of butt straps 11 3/8 Per centages of strength of longitudinal joint rivets 80.3 Working pressure of shell by rules 156 Size of manhole in shell 12x16 Size of compensating ring 34 1/2 x 34 1/2 x 1 1/8 No. and Description of Furnaces in each boiler 2-Riveted Material S. Outside diameter 4 1/8 Length of plain part top 7/16 Thickness of plates bottom 7/16

Description of longitudinal joint Welded No. of strengthening rings Working pressure of furnace by the rules 160 Combustion chamber plates: Material S. Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 5/8 Pitch of stays to ditto: Sides 6 1/2 x 6 1/2 Back 6 1/2 x 6 1/2

Top 6 1/2 x 6 3/4 stays are fitted with nuts or riveted heads riveted Working pressure by rules 255 Material of stays Iron Area at smallest part 1.233 Area supported by each stay 9 7/8 x 7 1/2 Working pressure by rules 148 End plates in steam space: Material S. Thickness 2 7/32

Pitch of stays 13 1/2 x 13 1/2 How are stays secured D. nuts Working pressure by rules 148 Material of stays S. Area at smallest part 3.141
 Area supported by each stay 13 1/2 x 13 1/2 Working pressure by rules 205 Material of Front plates at bottom S. Thickness 2 7/32 Material of Lower back plate S. Thickness 2 7/32 Greatest pitch of stays 400 sq. ins Working pressure of plate by rules 144 Diameter of tubes 2 3/4

Pitch of tubes 3 7/8 Material of tube plates S. Thickness: Front 2 7/32 Back 5/8 Mean pitch of stays 4 3/4 x 4 3/4 Pitch across wide water spaces 13 1/4 x 4 3/4 Working pressures by rules 211 Girders to Chamber tops: Material S. Depth and thickness of girder at centre 8" x 1 1/2 Length as per rule 24 1/2 Distance apart 6 3/4 Number and pitch of Stays in each 3 x 6 1/2

Working pressure by rules 254 Steam dome: description of joint to shell none % of strength of joint
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

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

The foregoing is a correct description,
Albert Kuman Manufacturer.
The American Ship Building Co.

Dates of Survey } During progress of } Feb 23. to May 15. 1928. Is the approved plan of boiler forwarded herewith Yes.
 while } work in shops - - }
 building } During erection on } July 2 to August 31. Total No. of visits 24. approximately
 board vessel - - - }

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
This boiler has been built under special survey & to the approved plans. The workmanship & materials were found to be sound & efficient. The boiler has been fitted on board in accordance with the Rules.

Survey Fee \$ 45.00 : : When applied for, Oct 15 19128.
 Travelling Expenses (if any) £ : : When received, 10.12.28 19128.
G. Drummond
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK NOV 21 1928
 Assigned I.S.B. 150 lb Steam Pressure
 Lloyd's Register Foundation
 010933-010942-0172