

Rpt. 5.

REPORT ON BOILERS.

No. 57^a

Received at London Office

WED. 14 JUN. 1916

Date of writing Report 10 When handed in at Local Office 10 Port of Cleveland, Ohio

No. in Survey held at Buffalo, N. Y. Date, First Survey 1915 Last Survey 19

Reg. Book. S.S. "CUBADIST" (Number of Visits) Tons {Gross Net

Master Amory Built at Amory By whom built Lake Erie S. B. Corp When built 1915

Engines made at Amory By whom made Lake Erie S. B. Corp. when made

Boilers made at Buffalo By whom made Lake Erie Boiler Works when made 1915

Registered Horse Power _____ Owners _____ Port belonging to _____

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Worth Bros

(Letter for record S.) Total Heating Surface of Boilers 7407 Is forced draft fitted _____ No. and Description of

Boilers 3 single ended Working Pressure 190 lbs Tested by hydraulic pressure to 285 Date of test 18.10.15

No. of Certificate 48 Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of

safety valves to each boiler _____ Area of each valve _____ Pressure to which they are adjusted _____

Are they fitted with easing gear _____ 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 14.2" Length 11.10"

Material of shell plates Steel Thickness 1.64 Range of tensile strength 28/32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams O. Riv. long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 5/16" Pitch of rivets 8"

Lap of plates or width of butt straps 18.5" Per centages of strength of longitudinal joint rivets 96.9 Working pressure of shell by plate 83.6

rules 201 lbs Size of manhole in shell 12" x 16" Size of compensating ring flanged end No. and Description of Furnaces in each

boiler 3 corrugated Material Steel Outside diameter 48.16" Length of plain part top 19 Thickness of plates crown 19 bottom 32

Description of longitudinal joint weld No. of strengthening rings _____ Working pressure of furnace by the rules 196 Combustion chamber

plates: Material Steel Thickness: Sides 4 1/6" Back 5/8" Top 4 1/6" Bottom 1 3/16" Pitch of stays to ditto: Sides 7 1/2" x 6 3/4" Back 7" x 7 1/4"

Top 7 1/4" x 7 1/2" If stays are fitted with nuts or riveted heads Riv 4/16" Working pressure by rules 193 Material of stays Steel Diameter at

smallest part 1.382 Area supported by each stay 54.3 Working pressure by rules 202 End plates in steam space: Material Steel Thickness 6 1/4" Area

Pitch of stays 15" x 15 1/2" How are stays secured D.N. Riv Working pressure by rules 200 Material of stays Steel Diameter at smallest part 4.9

Area supported by each stay 232.5 Working pressure by rules 219 Material of Front plates at bottom Steel Thickness 1 5/16" Material of

Lower back plate Steel Thickness 1 5/16" Greatest pitch of stays 12" x 7" Working pressure of plate by rules 233 Diameter of tubes 2 1/2"

Pitch of tubes 3 1/2" x 3 3/8" Material of tube plates Steel Thickness: Front 6 1/64" Back 3/4" Mean pitch of stays 10 1/4" Pitch across wide

water spaces 13" Working pressures by rules 192 4/5 Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 8 1/4" x 2 @ 3/4" Length as per rule 2.6" Distance apart 7 1/2" Number and pitch of Stays in each 3 @ 7 1/4"

Working pressure by rules 212 Superheater or Steam chest; how connected to boiler _____ Can the superheater be shut off and the boiler worked

separately _____ Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet

holes _____ Pitch of rivets _____ Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____

If stiffened with rings _____ Distance between rings _____ Working pressure by rules _____ End plates: Thickness _____ How stayed _____

Working pressure of end plates _____ Area of safety valves to superheater _____ Are they fitted with easing gear _____

VERTICAL DONKEY BOILER—No. _____ Description _____ Manufacturers of steel _____

Made at _____ By whom made _____ When made _____ Where fixed _____ Working pressure _____

tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can

enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____ Range of tensile

strength _____ Descrip. of riveting long. seams _____ Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____

Lap of plating _____ Per centage of strength of joint Rivets _____ Working pressure of shell by rules _____ Thickness of shell crown plates _____ Plates

Radius of do. _____ No. of Stays to do. _____ Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____

Thickness of furnace plates _____ Description of joint _____ Working pressure of furnace by rules _____ Thickness of furnace crown

plates _____ Radius of do. _____ Stayed by _____ Diameter of uptake _____ Thickness of uptake plates _____

Thickness of water tubes _____

LAKE ERIE BOILER WORKS. The foregoing is a correct description, L. N. Wheaton Mgr. Manufacturer.

Dates of Survey while building { During progress of work in shops - - } July 9, 20, 28, Aug 3, 27, Sept 9, 29, Oct 8, 13, 18, 28, Nov 3.

{ During erection on board vessel - - } _____

Total No. of visits _____ Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " _____



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

These boilers have been built under special survey: the material & workmanship being good. They were tested by hydrostatic pressure to 285 lbs per sq. inch & found tight. These boilers are eligible in my opinion for a working pressure of 190 lbs per square inch.

Certificate (if required) to be sent to
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee...	£	:	:	When applied for,
$\frac{1}{3}$ Special ...	\$74	: 00	:	30 Dec 1915
Donkey Boiler Fee ...	£	:	:	When received,
Travelling Expenses (if any)	\$35	: 00	:	19

A. T. Thomas
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI JUN 23 1916

Assigned