

REC'D NEW YORK March 21 1918

Received at London Office

Date of writing Report March 9 1918 When handed in at Local Office March 9 1918 Port of Seattle Wash U.S.A.

No. in Survey held at Seattle Date, First Survey January 25 1917 Last Survey February 5 1918

Reg. Book. FIRST ENTRY in the Steel Screw Steamer "SACRAMENTO" (Builder's No. 92) Tons Gross 4856.1 Net 3595.8

Master E. Cullen Built at Seattle By whom built Seattle Construction & Dry Dock Co. When built 1918

Engines made at Seattle By whom made Seattle Construction & Dry Dock Co. when made 1918

Boilers made at Seattle By whom made Seattle Construction & Dry Dock Co. when made 1918

Registered Horse Power 2500 Owners U.S. Shipping Board Emergency Fleet Port belonging to Seattle

Nom. Horse Power as per Section 28 472 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 24-40-70 Length of Stroke 48 Revs. per minute 70 Dia. of Screw shaft 14.13 14.10 Material of Steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight

in the propeller boss Yes If the liner is in more than one length are the joints burned Yes If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 4-9

Dia. of Tunnel shaft as per rule 12.67 12.79 as fitted 12.68 Dia. of Crank shaft journals as per rule 13.30 13.49 as fitted 13.36 Dia. of Crank pin 13.55 Size of Crank webs 19 10 1/2 Dia. of thrust shaft under

collars 13.375 Dia. of screw 17-0 Pitch of Screw 18-0 No. of Blades 4 State whether moveable No Total surface 98 sq ft

No. of Feed pumps 2 Diameter of ditto 7 Stroke 18 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 5 Stroke 20 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Duplex Sizes of Pumps Ballast 10 x 12 x 12 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two 3 1/2 - One 6 In Holds, &c. Hold No. 1 two 3 1/2. Hold No. 2 two 3 1/2

Hold No. 3 two 3 1/2. Shaft tunnel one 3

No. of Bilge Injections 1 sizes 10 Connected to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 6

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible None

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves and Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line Below

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes

What pipes are carried through the bunkers None How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Engine Room Platform at upper deck

BOILERS, &c.—(Letter for record Jan. 19 1917 Manufacturers of Steel North Brit. Co.)

Total Heating Surface of Boilers 6831 Is Forced Draft fitted Yes No. and Description of Boilers 3 Single ended Scotch Marine

Working Pressure 190 Tested by hydraulic pressure to 285 Date of test Aug 29 Sep 8 1917 No. of Certificate

Can each boiler be worked separately Yes Area of fire grate in each boiler 56.37 sq ft No. and Description of Safety Valves to

each boiler Two 3 1/2 spring loaded Area of each valve 9.62 Pressure to which they are adjusted 190 Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers on woodwork 12 Mean dia. of boilers 13-10 5/16 Length 11-11 7/16 Material of shell plates Steel

Thickness 1 5/16 Range of tensile strength 60,000 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Double

long. seams Triple Diameter of rivet holes in long. seams 1 5/16 Pitch of rivets 8 1/2 Top of plates width of butt straps 11 1/2 x 18 1/4

Per centages of strength of longitudinal joint rivets 82.46 plate 84.55 Working pressure of shell by rules 198 Size of manhole in shell 12 x 16

Size of compensating ring 30 x 32 No. and Description of Furnaces in each boiler 3 Morrison Material Steel Outside diameter 45 1/2

Length of plain part top bottom Thickness of plates crown bottom 7/16 Description of longitudinal joint welded No. of strengthening rings

Working pressure of furnace by the rules 194 Combustion chamber plates: Material Steel Thickness: Sides 5/8 Back 5/8 Top 5/8 1/16 Bottom 7/8

Pitch of stays to ditto: Sides 6 x 6 Back 6 x 7 1/16 Top 7 1/2 x 7 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 224 Top 240 Sides 278 Back

Material of stays Steel Area at smallest part 1.26 Area supported by each stay 39.4 Working pressure by rules 250 End plates in steam space:

Material Steel Thickness 1 5/32 Pitch of stays 17 1/2 x 17 1/2 How are stays secured Double Nuts Working pressure by rules 199 Material of stays Steel

Area at smallest part 6.49 Area supported by each stay 300 Working pressure by rules 225 Material of Front plates at bottom Steel

Thickness 3/4 Material of Lower back plate Steel Thickness 5/8 + 5/8 Greatest pitch of stays 12 5/16 Working pressure of plate by rules 375

Diameter of tubes 2 1/2 Pitch of tubes 3 5/8 Material of tube plates Steel Thickness: Front 3/4 Back 3/4 Mean pitch of stays 9

Pitch across wide water spaces 14 7/16 Working pressures by rules 234 Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 10 3/4 x 11 3/4 Length as per rule 34 Distance apart 7 1/2 Number and pitch of stays in each Three 7 1/2

Working pressure by rules 235 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

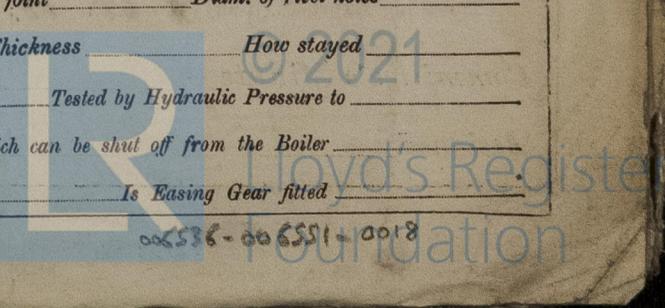
Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type None 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

Number of Safety Valves Pressure to which each is adjusted Is Easing Gear fitted

If not, state whether, and when, one will be sent SENT DOWN



00538-00551-0018

IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? _____

SPARE GEAR. State the articles supplied:—

2 Connecting rod top end bolts & nuts ✓	1 Set Piston springs ✓	A quantity of
2 Connecting rod bottom end bolts & nuts ✓	1 Propeller (cast iron)	assorted bolts, nuts
2 Main bearing bolts. ✓	20 Condenser tubes & ferrules.	and iron of various
1 Set Coupling bolts for one coupling ✓	6 Boiler tubes	sizes. ✓
1 Set Feed pump valves. ✓	2 Safety valve springs	
1 Set Bilge pump valves. ✓	100 Fire bars	

The foregoing is a correct description,
SEATTLE CONSTRUCTION AND DRY DOCK COMPANY

BY [Signature] SECRETARY

Manufacturer. March 9, 1918

Dates of Survey while building
 During progress of work in shops --- 1917 Jan. 17-25-26-31 Feb. 3-8-13-16-24-27 March 3-5-6-26 April 28 May 12-23-28-29 Nov. 5-12 (21)
 During erection on board vessel --- Aug. 23-29 Sep. 4-8-13 Oct. 16-25 Nov. 5-12-21-28 Dec. 5-8-12-14-24-28 31 Jan. 4-7-18-23-24-30 Feb. 5 (25)
 Total No. of visits 46. Is the approved plan of main boiler forwarded herewith Copy

Dates of Examination of principal parts—Cylinders April 30 Slides May 4-15 Covers May 4-15 Pistons April 28 Rods March 3-26
 Connecting rods April 28 Crank shaft May 12-29 Thrust shaft Nov. 5 Tunnel shafts Nov. 5-12 Screw shaft Nov. 5-12 Propeller Nov. 5-12
 Stern tube Nov. 5-12 Steam pipes tested Dec. 5-14 Engine and boiler seatings Oct. 25 Engines holding down bolts Dec. 24
 Completion of pumping arrangements Dec. 24 Boilers fixed Dec. 14 Engines tried under steam Jan. 18 Feb. 1918
 Completion of fitting sea connections Nov. 5 Stern tube Nov. 12 Screw shaft and propeller Nov. 12-21
 Main boiler safety valves adjusted Feb. 5 Thickness of adjusting washers Std. 27-3/4 Center 7 5/8 Port 49-1"
 Material of Crank shaft Steel Identification Mark on Do. 29-3-17 Material of Thrust shaft Steel Identification Mark on Do. 22-5-17
 Material of Tunnel shafts Steel Identification Marks on Do. 321 Material of Screw shafts Identification Marks on Do. 341
 Material of Steam Pipes Steel Test pressure 570
 Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. _____
 Have the requirements of Section 49 of the Rules been complied with _____
 Is this machinery duplicate of a previous case yes If so, state name of vessel "KEY WEST" - "STORVIKEN"

General Remarks (State quality of workmanship, opinions as to class, &c. The Engines and Boilers have been)
constructed and installed under special survey and in accordance with the approved
plans together with auxiliaries, pipes, mountings and sea connections.
The material and workmanship are both of good quality, on completion the
machinery seen tried under steam and found satisfactory.
The Machinery eligible, in my opinion, to have the record of + LMC 2-18 made
in the Register Book in the case of this vessel.

It is submitted that
 this vessel is eligible for
 THE RECORD. + LMC 2.18. ED.

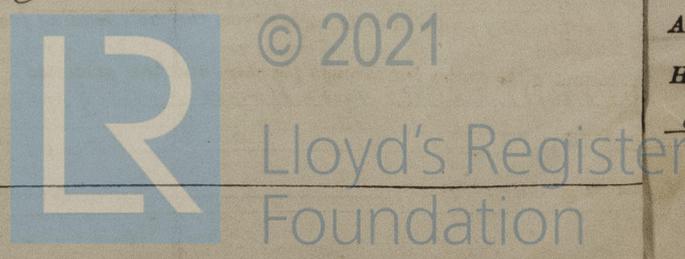
[Signature]
 12/4/18

James Fowler
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... \$ 73 : 05 :
 Special ... \$ 218 : 00 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) \$ 68 : 00 :
 When applied for, March 1918
 When received, March 1918

Committee's Minute New York MAR 26 1918

Assigned + dmb 2.18
Ellc. Light
 MACHINERY CERTIFICATE
 WRITTEN 9.4.18



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