

REC'D NEW YORK Aug 20-1918  
Date of writing Report Aug 2<sup>nd</sup> 1918 When handed in at Local Office Aug 2<sup>nd</sup> 1918 Port of Vancouver, B.C.  
No. in Survey held at Victoria, B.C. Date, First Survey Jan 5<sup>th</sup> Last Survey July 8<sup>th</sup> 1918  
Reg. Book: 1<sup>st</sup> Entry on the "Wood Screw Steamer" "War Hootka" (Number of Visits) 17 Tons Gross 2332 Net 1440  
Master N.C. King. Built at Vancouver, By whom built Western Canada Shipyard When built 1917.  
Engines made at Toronto By whom made Canadian Allis-Chalmers when made 1918.  
Boilers made at Montreal By whom made Canadian Tickers when made 1918.  
Registered Horse Power 935 Owners Messrs. Furnie & Co. Port belonging to Liverpool.  
Nom. Horse Power as per Section 28 322 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted yes.

ENGINES, &c.—Description of Engines Inverted Triple Expansion No. of Cylinders 3 No. of Cranks 3  
Dia. of Cylinders 28" x 33" x 54" Length of Stroke 40" Revs. per minute 70 Dia. of Screw shaft as per rule 14.77 Material of screw shaft as fitted 12  
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'-1"  
Dia. of Tunnel shaft as per rule 10.39 10.4 Dia. of Crank shaft journals as per rule 10.92 11.9 Dia. of Crank pin 11.9 Size of Crank webs 6.5 x 2.1 Dia. of thrust shaft under  
collars 11.5 Dia. of screw 14'-6" Pitch of Screw 15'-3" No. of Blades 4 State whether moveable no Total surface 66.45  
No. of Feed pumps 2 Diameter of ditto 3.5 Stroke 20 Can one be overhauled while the other is at work yes.  
No. of Bilge pumps 2 Diameter of ditto 3.5 Stroke 20 Can one be overhauled while the other is at work yes.  
No. of Donkey Engines 3 Sizes of Pumps 6x4x6-7 1/2 x 9 x 10-10 x 6 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps  
In Engine Room 4-3" In Holds, &c. 1-forepeak 2-1 Hold - 2-Deep Tank.  
3-#2 Hold, 1-Tunnel, 1-after Peak all 3"  
No. of Bilge Injections 1 sizes 6" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size yes 3"  
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 yes.  
Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Valves & 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 above  
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 no  
What pipes are carried through the bunkers Bilge + deep tank filling How are they protected Iron Sheathing  
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 Top Engine Platform  
BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Lukens Steel Co. Coatesville, Pa.

Total Heating Surface of Boilers 5280 sq ft Is Forced Draft fitted yes No. and Description of Boilers 3 Horizontal W.T. BRS.  
Working Pressure 185 Tested by hydraulic pressure to 280 Date of test 17<sup>th</sup> May 1918 No. of Certificate 3.  
Can each boiler be worked separately yes. Area of fire grate in each boiler 60 sq ft No. and Description of Safety Valves to  
each boiler Spring loaded. Area of each valve 8.2958 Pressure to which they are adjusted 185 Are they fitted with easing gear yes  
Smallest distance between boilers or uptakes and bunkers or woodwork 8" Mean dia. of boilers 13'-6" Length 12'-0" Material of shell plates Steel  
Thickness 9/16 Range of tensile strength 26 to 30 tons Are the shell plates welded or flanged flanged Descrip. of riveting: cir. seams Single  
long. seams double Diameter of rivet holes in long. seams 7/8 Pitch of rivets 3 1/2 Lap of plates or width of butt straps 7 1/2  
Per centages of strength of longitudinal joint rivets plate Working pressure of shell by rules Size of manhole in shell  
Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter  
Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings  
bottom Thickness of plates bottom Working pressure of furnace by the rules Combustion chamber plates: Material Steel Thickness: Sides Back Top 13/8 Bottom  
Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules  
Material of stays Steel Area at smallest part 1 1/8 Area supported by each stay 40.5 Working pressure by rules 197 End plates in steam space:  
Material Steel Thickness 7/8 x 3/4 Pitch of stays 3 How are stays secured 2 flanged Working pressure by rules 197 Material of stays Steel  
Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom  
Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules  
Diameter of tubes 2" Pitch of tubes 3 1/8 x 2 1/4 Material of tube plates Steel Thickness: Front 13/8 Back 13/8 Mean pitch of stays  
Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Steel Depth and  
thickness of girder at centre 6 1/4 x 1 1/8 10 ft Length as per rule Distance apart 6" Number and pitch of stays in each 4-6 3/4  
Working pressure by rules 197 Steam dome: description of joint to shell collector studs in flanges. % of strength of joint  
Diameter 27" Thickness of shell plates 7/16 Material Steel Description of longitudinal joint Lap Diam. of rivet holes 13/16  
Pitch of rivets 2 1/2 Working pressure of shell by rules 252 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

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  
2 connecting rod bottom end bolts + nuts. 2 main bearing bolts  
+ nuts. 1 set coupling bolts + nuts.  
1 set feed pump valves. 1 set bilge pump valves. 1 set piston rings  
and springs for each cylinder. 1 set air pump valves. 1 set  
circulating pump valves. 1 propeller. 50 assorted bolts and nuts.  
2 iron rods of each size  $\frac{1}{2}$ "  $\frac{5}{8}$ "  $\frac{3}{4}$ "  $\frac{7}{8}$ " 1"  $1\frac{1}{8}$ " all 10 ft. long.

The foregoing is a correct description,

Canadian Allis Chalmers Ltd.  
Per Melville White.

Manufacturer.

Dates of Survey while building { During progress of work in shops -- Jan 8-11-14, Feb 15-25 March 11-13-24-28 April 8-13 May 6-10-28 June 21  
During erection on board vessel -- July 6-8  
Total No. of visits 17

Is the approved plan of main boiler forwarded herewith

" " " donkey " " " ☒

Dates of Examination of principal parts—Cylinders 15-2-18 Slides 15-2-18 Covers 15-2-18 Pistons 25-2-18 Rods 25-2-18

Connecting rods 11-3-18 Crank shaft 13-3-18 Thrust shaft 21-3-18 Tunnel shafts 28-3-18 Screw shaft 8-1-18 Propeller 8-1-18

Stern tube 8-1-18 Steam pipes tested 21-6-18 Engine and boiler seatings 8-4-18 Engines holding down bolts 13-4-18

Completion of pumping arrangements 28-5-18 Boilers fixed 6-5-18 Engines tried under steam 29-5-18

Completion of fitting sea connections 11-1-18 Stern tube 8-1-18 Screw shaft and propeller 8-1-18

Main boiler safety valves adjusted 17-5-18 Thickness of adjusting washers P 7/8 S 3/8, P 7/8 S 3/8

Material of Crank shaft O.H. Steel Identification Mark on Do. 76 R.C.B. 6-12-17 Material of Thrust shaft O.H. Steel Identification Mark on Do. 75 R.C.B. 6-12-17

Material of Tunnel shafts O.H. Steel Identification Marks on Do. 72 R.C.B. 6-12-17 Material of Screw shafts O.H. Steel Identification Marks on Do. 71 R.C.B. 6-12-17

Material of Steam Pipes Steel. Test pressure 300 lbs.

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 *Yes*

Is this machinery duplicate of a previous case *no* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Engines and Boilers have been built and installed under Special Survey and in accordance with the approved Plans, together with auxiliaries, pipes, mountings, fittings and sea connections.

The material and workmanship are both good quality. On completion the machinery tried under steam and found satisfactory.

The machinery and boilers eligible, in my opinion to have the record L.M.C 7-18 B.S. 7-18 made in the Register Book in the case of this vessel.

It is submitted that this vessel is eligible for

THE RECORD, + L.M.C 7.18 F.D.

WATER TUBE BOILERS SUBJECT TO ANNUAL SURVEY

The amount of Entry Fee ... £ 60 : 50 :

When applied for, 19...

Special and fitting on board of Donkey Boiler Fee ... \$ 120 : 00 :

When received, 30/4/19

New York ... \$ 1 : 00 :

Travelling Expenses (if any) \$ 47 : 00 :

FRI. 4-OCT. 1918

Committee's Minute

Assigned

+ L.M.C. 7 18 B.S. 7 18  
Water Tube Boilers  
subject

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

MACHINERY CERTIFICATE

TUE. 10 DEC. 1918  
TUE. 25 MAR. 1919

Lloyd's Register  
Foundation