

REPORT ON MACHINERY

Seattle 484.

No. 547

REC'D NEW YORK

Received at London Office

Date of writing Report 19 When handed in at Local Office 19 Ports of Seattle and Portland

No. in Survey held at Spokane, Wash. Date, First Survey July 30 Last Survey Nov. 24 1918

Reg. Book. on the Single Screw Steel S.S. War Cavalry (Number of Visits Five)

Master John Park Built at Vancouver, B.C. By whom built McLaughlin & Sons Ltd. Tons { Gross Net 1919

Engines made at Spokane, Wash. By whom made Hallidie Co. when made 1918

Boilers made at Vancouver, B.C. By whom made Vulcan Iron Works Ltd. when made 1919.

Registered Horse Power 564 Owners, Imperial Munitions Board Port belonging to London

Shaft Horse Power at Full Power 2800 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Description of Engines Gross compound, geared Parsons Type No. of Turbines 2

Diameter of Rotor Shaft Journals, H.P. 4" L.P. 4" Diameter of Pinion Shaft 4 1/8" + 12 5/8"

Diameter of Journals 5" + 10" Distance between Centres of Bearings 2' 6" + 5' 1 1/2" Diameter of Pitch Circle 7' 4 1/2" + 13' 2"

Diameter of Wheel Shaft 13 1/2" Distance between Centres of Bearings 5' 1 1/2" Diameter of Pitch Circle of Wheels 5' 46" + 48' 8"

Width of Face 15" + 14" Diameter of Thrust Shaft under Collars Diameter of Tunnel Shaft as per rule as fitted

No. of Screw Shafts Diameter of same as per rule as fitted Diameter of Propeller Pitch of Propeller

No. of Blades State whether Moveable Total Surface Diameter of Rotor Drum, H.P. 13' 11" L.P. 26" Astern 2' 5" mean

Thickness at Bottom of Groove, H.P. L.P. Astern Revs. per Minute at Full Power, Turbine 3200 Propeller 90

PARTICULARS OF BLADING.

H. P. L. P. ASTERN.

HEIGHT OF BLADES. DIAMETER AT TIP. NO. OF ROWS. HEIGHT OF BLADES. DIAMETER AT TIP. NO. OF ROWS. HEIGHT OF BLADES. DIAMETER AT TIP. NO. OF ROWS.

ST EXPANSION 11/16" 1' 2 3/8" 4 1 1/8" 2' 5 3/4" 2 H.P. + L.P. Turbines fitted

ND 7/8" 1' 2 3/4" 4 2 1/2" 2' 4" 2 with Astern units impulse

RD 1 1/8" 1' 3 1/4" 6 3 1/8" 2' 8 5/8" 2 nozzles on a mean diameter

TH 1 1/16" 1' 3 1/2" 6 4 3/8" 2' 10 1/4" 2 of 2' 5"

TH 1" 1' 9" 3 5" 3' 0" 1 H.P. 5" nozzle L.P. 1 1/2" nozzle

TH 1 5/16" 1' 9 5/8" 3 5" 3' 0" 1 3 Rows of buckets in each

TH 1 1/16" 1' 10 3/8" 3 5" 3' 0" 1 case.

TH 2 3/8" 1' 11 1/4" 3 5" 3' 0" 1

No. and size of Feed pumps

No. and size of Bilge pumps

No. and size of Bilge suction in Engine Room

In Holds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible

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

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

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

That pipes are carried through the bunkers How are they protected

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

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

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c. (Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers

Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate

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

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

Long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint 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 Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top 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 Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Diameter 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 Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

Thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % of strength of joint Diameter

Thickness of shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets

Working pressure of shell by rules Crown plates: Thickness How stayed

