

pt. 4. REPORT ON MACHINERY. No. 229
Received at London Office
Date of writing Report April 11 1919 When handed in at Local Office April 11 1919 Port of Vancouver, B.C.
Survey held at Vancouver, B.C. Date, First Survey 3/12/18, Last Survey April 10 1919
on the Single Screw Steamship "War Convoy", (Number of Visits 12) Tons Gross 5755.04 Net 4173.41
Master D. Giffies Built at Vancouver, B.C. By whom built L. Coughlan & Sons, When built 1919
Engines made at Spokane, Wash. By whom made The Hallidie Company, when made 1918,
Boilers made at Vancouver, B.C. By whom made Vulcan Iron Works, Ltd. when made 1919
Horse Power 2500 Owners Imperial Mercantile Board Port belonging to London,
Horse Power as per Section 28 564 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ES, &c.—Description of Engines Parsons Cross Compound Double No. of Cylinders 2 No. of Cranks 2
Reduction Geared Turbines 208 as per rule 14" Material of Steel
Cylinders Length of Stroke Revs. per minute 90 Dia. of Screw shaft as fitted 14" screw shaft
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
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
the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Tight fit If two
are fitted, is the shaft lapped or protected between the liners Length of stern bush 4' 2" Dia. of shaft 13 1/2" Size of Crank webs Dia. of thrust shaft under
Tunnel shaft as per rule 12 5/16" Dia. of Crank shaft journals as per rule 13 1/2" as fitted 12 5/16" Dia. of screw 17' 0" Pitch of Screw 13 ft. No. of Blades 4 State whether moveable Yes Total surface 81 Sq. Ft.
Feed pumps 2 off. Diameter of ditto 8" Stroke 16" Can one be overhauled while the other is at work Yes
Bilge pumps 2 off. Diameter of ditto 8 1/2" Stroke 12" Can one be overhauled while the other is at work Yes
Donkey Engines One Sizes of Pumps 12 x 12 x 12" No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room 4 off. 3 1/2" Diam. In Holds, &c. Two in each hold 3 1/2" Diam.
Ten in all.
Bilge Injections 1 sizes 10" Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size Yes 20 3/2"
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
connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
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
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
pipes are carried through the bunkers None How are they protected Yes
Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper Deck

ERS, &c.—(Letter for record S.) Manufacturers of Steel Illinois Steel Co.
Heating Surface of Boilers 8008 5 Is Forced Draft fitted Yes No. and Description of Boilers 3 Single Ended Scotch
Working Pressure 190 lb. Tested by hydraulic pressure to 300 lb. Date of test Dec 19/18, No. of Certificate 13.
each boiler be worked separately Yes Area of fire grate in each boiler 63 Sq. Feet. No. and Description of Safety Valves to
boiler Two of Marine Area of each valve 9.06 Pressure to which they are adjusted 190 lb. Are they fitted with easing gear Yes
least distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 14' 9 1/2" Length 11' 5 1/2" Material of shell plates Steel
Range of tensile strength 65,000 Are the shell plates welded or flanged neither Descrip. of riveting: cir. seams D.R. Lap.
seams Double Butt Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 4' 30" Lap of plates or width of butt straps 22 1/2" x 14 1/2"
percentages of strength of longitudinal joint rivets 94.5 Working pressure of shell by rules 208.9 Size of manhole in head 12" x 16"
of compensating ring No. and Description of Furnaces in each boiler 3 Morrison Material Steel Outside diameter 48 3/16"
th of plain part top 8 1/2" Thickness of plates crown 19/32 Description of longitudinal joint No. of strengthening rings
bottom 8 1/2" bottom 19/32
Working pressure of furnace by the rules 195.9 Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 7/8"
of stays to ditto: Sides 10 5/32" Back 7 3/16" Top 7 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 194
Material of stays Steel Area at smallest part 2.04 Area supported by each stay 4.9 Working pressure by rules 253, End plates in steam space:
Material Steel Thickness 1 1/16" Pitch of stays 16 1/4" How are stays secured Nuts Working pressure by rules 193, Material of stays Steel
at smallest part 4' 9" Area supported by each stay 26.4 Working pressure by rules 193, Material of Front plates at bottom Steel
Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 7 1/32 Working pressure of plate by rules 212.
Diameter of tubes 3' 0" Pitch of tubes 4' 8" x 4" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 7 1/32.
across wide water spaces 13" Working pressures by rules 204 lb. Girders to Chamber tops: Material Steel Depth and
thickness of girder at centre 10" x 3/4" Length as per rule 3' 0" Distance apart 7 1/2" Number and pitch of stays in each 30 off. 7 1/2" Pitch
Working pressure by rules 236 Steam dome: description of joint to shell % of strength of joint
Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
Working pressure of shell by rules Crown plates Thickness How stayed
SUPERHEATER. Type Foster Date of Approval of Plan Tested by Hydraulic Pressure to 630 lb.
of Test 12-2-19 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes
Number of Safety Valve 1 1/2 in each Section Pressure to which each is adjusted 210 lb. Is Easing Gear fitted Yes

W10-0042

IS A DONKEY BOILER FITTED? *Vo*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:—*1 Thrust Bearing complete, 2 Slides & Vents for Rotor Bearing, 2 Vents for Main Turbine, 2 Slides & Vents for Main Gear Bearing, 2 Slides & Vents for Pinion Bearing, 1 Set of Bolts each Size 1/20 Bolts Casing joint 1/20 Bolts for Turbine Joint, 2 Thermometers for oil cooling system, 1 Set Bearing Bushes for 1 Gear Wheel, 1 Set of Bearing Bushes for one Pinion, 1 Bearing Bushes for one Rotor Bearing, 1 Set Packing Rotor Glands, 1 Set Pads, Kingsbury, 1 Set of Feed Pump Valves, 1 Set of Bilge Pump Valves, 1 Bucket & Rod for Lubricating oil, Assorted Bolts & nuts, Steel Bars & Plates, Spare Propeller Blade, Spare Tail Shaft, Spare Boiler Tube, Set Spare Check Valves, Spare Safety Valve Springs, Spare Super heater Coils, Spare Condenser Tubes & ferrules.*

The foregoing is a correct description,

J. Longman & Sons
by J. Longman Partner

Manufacturer.

Dates of Survey while building
During progress of work in shops: *3/12/18, 16/12/18, 19/12/18, 2/1/19, 22/1/19, 19/2/19, 2/3/19*
During erection on board vessel: *8/3/19, 10/3/19, 12/3/19, 13/3/19, 17/3/19, 20/3/19, 25/3/19, 26/3/19*
Total No. of visits: *10/4/19 12 visits*

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders ☒ Slides ☒ Covers ☒ Pistons ☒ Rods ☒
Connecting rods ☒ Crank shaft ☒ Thrust shaft *23/1/18* Tunnel shafts *13/3/19* Screw shaft *16/12/18* Propeller *16/12/18*
Stern tube *16/12/18* Steam pipes tested *8/3/19* Engine and boiler seatings *12/3/19* Engines holding down bolts *13/3/19*
Completion of pumping arrangements *8/3/19* Boilers fixed *26/12/19* Engines tried under steam *17/3/19*
Completion of fitting sea connections *16/12/18* Stern tube *16/12/18* Screw shaft and propeller *16/12/18*
Main boiler safety valves adjusted *10/4/19* Thickness of adjusting washers *155, 30.13.15*
Material of *Rotor* shaft *Steel* Identification Mark on Do. *L.R.* Material of Thrust shaft *Steel* Identification Mark on Do. *155*
Material of Tunnel shafts *Steel* Identification Marks on Do. *Lloyd's 1918 G.M.C.* Material of Screw shafts *Steel* Identification Marks on Do. *2*
Material of Steam Pipes *Steel* Test pressure *600 lb per Sq. Inch*
Is an installation fitted for burning oil fuel ☒ 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? *Vo* If so, state name of vessel ☒

General Remarks (State quality of workmanship, opinions as to class, &c. *The Engines and Boilers of this*

Vessel have been built and installed under Special Survey, and in accordance with approved Plans, together with Auxiliaries, Piping, Mountings, Fittings & Sea Connections. The Material and Workmanship are both of Good Quality. On completion of machinery Installation the Vessel was tried under Full Steam at Sea and for

Satisfactory. Safety Valves were floated independently.

Tail Shaft is a continuous Liner.

The Machinery & Boilers are eligible in my opinion to have the Rec L.M.C. 4. 19. made in the Register Book in the case of this vessel.

Please refer to Seattle Report No 482.

Please refer to Pittsburgh Report No 55.

It is submitted that this vessel is eligible for THE RECORD, + L.M.C. 4.19. 2 Steam Turbines geared to 1 Screw Shaft.

The amount of Entry Fee ... £ *76.00* When applied for, *April 14 1919*
Special ... £ *76.00* When received, *20/9/19*
Donkey Boiler Fee ...
Travelling Expenses (if any) £ ...
FRI. 23 MAY. 1919

Committee's Minute

Assigned

MACHINERY CERTIFICATE WRITTEN.

C. P. McEwen
Engineer Surveyor to Lloyd's Register of Shipping

FRI. 25 JUL. 1919

Lloyd's Register Foundation